



**DISARMING DEFENSIVE MEDICAL PRACTICES: AN
ANALYSIS OF DOCTORS' DUTIES AND ACCEPTABLE
PRACTICE IN NSW CASE LAW INVOLVING ERRORS
OR DELAYS IN DIAGNOSIS AND TREATMENT**

Autumn 2020



ABSTRACT

Global studies have established the prevalence of defensive medicine, the existence of which reflects an industry that to date, has failed to appreciate the harms which present from over intervention. This article examines the way in which courts, in light of current defensive medical practices, seek to strike a balance between under-and-over investigation of patients. In doing so, the article uses doctrinal and qualitative methodologies to analyse 10 NSW cases in which delays or errors in diagnosis or treatment are alleged. The analysis traverses the duty upon a doctor to investigate symptoms that are susceptible to more than one diagnosis, clarifies the legal duties of general practitioners, specialists and patients, and canvases the evidentiary matters specific to malpractice claims. Finally, it concludes with three key findings to inform both medical and legal practitioners of how the courts adjudicate the standard of care in circumstances of heightened legal and medical ambiguity.

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I INTRODUCTION

Imagine the following scenario... a thirty-year-old woman visits her general practitioner ('GP') complaining of mild rectal bleeding and is worried about bowel cancer. She has a hemorrhoid – the likely source of the bleeding - and no family history of cancer or other symptoms that cause concern for the GP. However, there is still a chance of a more sinister diagnosis. Should the GP refer this woman who has no other risk factors of bowel cancer to a specialist for a colonoscopy? The GP is aware of the Choosing Wisely recommendation, which advises

against ordering unnecessary colonoscopies, which have risks as serious as bowel perforation and infection.¹ If she has cancer, the GP runs the risk of being held liable for a missed or delayed diagnosis.²

The decision the doctor makes in this patient scenario will be influenced by their perception of the law. Doctors who are more worried about their legal risks and are uncertain of what the law expects of them are more likely to make poor clinical decisions, such as referring a low-risk patient for an invasive procedure against clinical guidelines. Doctors' perceptions of their legal risks influence their professional practice. Defensive medical practice occurs when doctors order tests, treatments and procedures out of liability fear, rather than to benefit the patient.³ When patients present with symptoms susceptible of more than one diagnosis, clinicians are more likely to experience heightened legal anxiety and engage in defensive behaviours. Commentators suggest this behaviour is driven by practitioners' misapprehension of their legal duties coupled with a culture that favours more testing and treating.⁴

The fear of litigation is widely reported as a main motivation for unnecessary medical investigations and procedures.⁵ Surveys conducted within a variety of countries evidence defensive medicine as a global problem.⁶ However, only a minority of doctors experience a malpractice claim during their career, with an even smaller number resulting in a recorded judgment.⁷ Therefore, the data produced in this area is difficult to reconcile. Survey data offers valuable insight into the widespread fears held by doctors, while case law represents situations where legal fears have materialised and been adjudicated. This article offers a critical analysis of doctors' legal duties and standard of care through an

¹ Choosing Wisely Australia, 'Recommendations: The Royal Australian College of General Practitioners', *Choosing Wisely* (1 March 2016) <<https://www.choosingwisely.org.au/recommendations/racgp6>>.

² This scenario is based on a disciplinary tribunal case, where the woman did have rectal cancer. As the woman had no significant risk factors or other symptoms that suggested this diagnosis, the Tribunal held the doctor did not act carelessly by not referring her for further investigations. See *Medical Board of Western Australia and Richards* [2010] WASAT 94.

³ Tom Bourne et al, 'The Impact of Complaints Procedures on the Welfare, Health and Clinical Practice of 7926 Doctors in the United Kingdom: A Cross-Sectional Survey' (2015) 5(1) *BMJ Open* e006687, 2.

⁴ Ian A Scott et al, 'Countering Cognitive Biases in Minimising Low Value Care' (2017) 206(9) *The Medical Journal of Australia* 407, 408; Nola M Ries, 'Choosing Wisely: Law's Contribution as a Cause of and a Cure for Unwise Health Care Choices' (2017) 25(1) *Journal of Law and Medicine* 210, 213.

⁵ Choosing Wisely Australia, *Choosing Wisely Australia 2018 Report: Conversations for Change* (Annual Report, 2018) 30; Massimiliano Panella et al, 'Prevalence and Costs of Defensive Medicine: A National Survey of Italian Physicians' (2017) 22(4) *Journal of Health Services Research & Policy* 211; Heather Lyu et al, 'Overtreatment in the United States' (2017) 12(9) *PLOS One* e0181970; Osman Ortashi et al, 'The Practice of Defensive Medicine among Hospital Doctors in the United Kingdom' (2013) 14(1) *BMC Medical Ethics* 42.

⁶ *Ibid.*

⁷ Ortashi et al (n 5) 44.

examination of NSW case law that deals with allegations of erroneous or delayed diagnosis or treatment. This analysis will clarify what the law expects of medical practitioners and allow doctors to practice with greater legal confidence.

There is a need for doctors to strike a balance between the under-and-over investigation of patients. Although many doctors do not consider the practice of defensive medicine to have any potential harms to patients, when doctors order tests, issue referrals or undertake invasive procedures to mitigate their *perceived* legal risks, they are exposing patients to potential harms as well as exposing themselves to greater legal liability.⁸ For reasons explained by this article, it is evident that the law does not encourage nor permit practitioners to subject patients to invasive procedures or unnecessary tests in circumstances where there is not a clear benefit.

The article is organised as follows. Part II provides an overview of the current trends and subsequent harms of defensive medical practices, both domestically and within a global context. It summarises the general principles of medical negligence and the relevant statutory framework, the *Civil Liability Act 2002* (NSW) ('*CLA*'), with a focus on section 50, which governs the standard of care for professionals in the provision of their services. Part III outlines the article's use of both doctrinal and qualitative methodologies to thematically categorise the sample of case law. Part IV provides an original analysis of 10 NSW cases relating an error or delay in diagnosis or treatment. This section of the article provides an analysis of the interpretation and application of section 50 of the *CLA* and delivers insight into how the court determines the standard of care in circumstances of heightened legal and medical ambiguity. Part V offers critical commentary on the body of case law by situating the analysis within the broader context of health care. This section aims to inform both legal and medical practitioners of doctor's legal duties and standard of investigation required by the law. Part VI concludes the article, noting a greater understanding of doctors' duties and liabilities under the law is essential in combatting unwanted defensive medical practices.

⁸ Panella et al (n 5) 215; Eva W Verkerk et al, 'Limit, Lean or Listen? A Typology of Low-Value Care That Gives Direction in de-Implementation' (2018) 30(9) *International Journal for Quality in Health Care* 736, 736.

II A CONTEXTUAL BACKGROUND

A *Contemporary Healthcare Context: Current Trends and Harms of Defensive Medicine*

Defensive medicine has been documented through literature for over four decades.⁹ Lawton LJ in 1980 stated ‘allegations of negligence against a practitioner should be considered very serious... [it] may jeopardise his career... if courts make findings of negligence on flimsy evidence... doctors are likely to protect themselves by what has become known as defensive medicine’.¹⁰ In 2018 the fear of litigation was reported by Australian GPs and specialists as one the main motivations for ordering unnecessary tests, procedures and treatments.¹¹ A national survey in Italy reported 60% of 1313 of physicians are practicing defensively.¹² A US survey of over 2000 doctors reported 85% of respondents are over treating patients out of fear of being sued.¹³ A study in the UK has similarly reported high numbers (78%) of doctors practicing defensively.¹⁴ Defensive medicine is widespread and takes many forms within a doctor’s practice, including ordering unnecessary diagnostic imagery; unnecessarily issuing referrals, over documentation of clinical notes, prescribing more medication than needed and recommending invasive procedures against professional judgment.¹⁵

Defensive medicine fuels low-value care, that is, care that confers little to no benefit and instead may cause harm to patients.¹⁶ This behaviour leads to higher rates of overdiagnosis and overtreatment.¹⁷ Overdiagnosis occurs when individuals are diagnosed with a disease that will not negatively affect them during the course of their life nor cause early mortality.¹⁸ Practitioners often offset the harms of overdiagnosis with the perceived

⁹ LR Tancredi and JA Baroness, ‘The Problem of Defensive Medicine’ (1978) 200(4344) *Science* 879; Daniel Kessler; Mark McClellan, ‘Do Doctors Practice Defensive Medicine?’ (1996) 111(2) *Quarterly Journal of Economics* 353.

¹⁰ *Whitehouse v Jordan* [1980] 1 All ER 650, 659.

¹¹ *Choosing Wisely Australia* (n 5) 39.

¹² Panella et al (n 5) 214.

¹³ Lyu et al (n 5) 7.

¹⁴ Ortashi et al (n 5) 47.

¹⁵ Elisabeth Assing Hvidt et al, ‘How is Defensive Medicine Understood and Experienced in a Primary Care Setting? A Qualitative Focus Group Study among Danish GPs’ (2017) 7(12) *BMJ open* e019851, 4.

¹⁶ Scott et al (n 4) 407.

¹⁷ *Ibid*; Minal S Kale and Deborah Korenstein, ‘Overdiagnosis in Primary Care: Framing the Problem and Finding Solutions’ (2018) 362 *BMJ (Clinical Research Edition)* k2820, 2827.

¹⁸ Kale and Korenstein (n 17) 2820.

benefits of early diagnosis.¹⁹ However, literature suggests only a small portion of patients benefit from the detection.²⁰ Scott et al characterise this as impact bias and argue that practitioners are not objectively weighting the benefits against the harms caused by unnecessary medical interventions.²¹ It is not solely economic setbacks patients suffer, rather they are susceptible to infections or complications from unnecessary treatments as well as a multitude of psychological ramifications from the adverse effects of being ‘labelled’ with a disease.²²

In addition to increasing the risk of harm to patients, defensive medicine can increase the risk of liability for practitioners. Doctors who issue referrals or send patients off for unnecessary tests or procedures, ‘just in case’, can trigger a cascade of unnecessary sequential tests and incidental findings, rarely amounting to any clinical importance.²³ Incidental findings are previously undiagnosed conditions that are discovered unintentionally during the course of conducting other medical evaluations. In 2012, Moynihan et al reported that all scanning of the abdomen, pelvis, chest, head and neck resulted in incidental findings in up to 40% of individuals.²⁴ With nearly half these scans being ordered for defensive purposes,²⁵ highlights the ironic potential for initial defensive decisions to create greater legal risks for doctors, by unnecessarily subjecting patients to possible harms and complications.

Verkerk and colleagues have developed a typology with three categories of low-value care: ‘ineffective care’, ‘inefficient care’ and ‘unwanted care’.²⁶ The cases examined in this article often fall within the scope of inefficient care, which includes care that is in essence effective for targeting the condition however, confers little to no benefit by subjecting patients to inappropriate or overly intensive treatments.²⁷ For doctors to decrease inefficient care they must limit the use medical services to ensure patients only

¹⁹ Ibid 2823; Ray Moynihan, Jenny Doust and David Henry, ‘Preventing Overdiagnosis: How to Stop Harming the Healthy.’ (2012) 344 *BMJ (Clinical research ed.)* 3502, 3505.

²⁰ Moynihan, Doust and Henry (n 19) 3504.

²¹ Scott et al (n 4) 407.

²² Kale and Korenstein (n 17) 2826.

²³ Ibid 2823.

²⁴ Moynihan, Doust and Henry (n 19) 3504.

²⁵ Choosing Wisely Australia, ‘Choosing Wisely Australia 2018 Report: Conversations for Change’ (n 6) 30.

²⁶ Verkerk et al (n 8) 736.

²⁷ Ibid 738.

undergo tests and procedures that are supported by clinical evidence and guidelines.²⁸ Ineffective care refers to use of interventions that have been disproven through medical research, and thus need to be de-implemented.²⁹ Finally, unwanted care refers to care that is not aligned with patient preferences and thus calls for more effective communication between practitioners and patients.³⁰ Although the scope of low-value care is wide, there are solutions practitioners can implement to resolve the issue, notably, clinicians' fears of being sued must be countered.

B *General Principles of Medical Negligence and Background of the Civil Liability Act 2002 (NSW)*

Certain relationships between two parties attract a legal duty of care to be owed from one individual to the other, to avoid reasonably foreseeable harm.³¹ For a claim in negligence to succeed a plaintiff must prove a duty of care was owed and subsequently breached by the defendant, by reason of failing to take reasonable care and as a result the plaintiff has suffered an injury or damage.³²

There are established categories at law that give rise to a duty of care, notably, the professional relationship between a medical practitioner and a patient. In *Rogers v Whitaker*, the High Court of Australia ('HCA') held the law imposes a '*single comprehensive duty* covering all the ways in which a doctor is called upon to exercise his skill and judgment; it extends to the examination, diagnosis and treatment of the patient and the provision of information in an appropriate case'.³³ The duty of care between doctors and their patients is settled within tort law and accordingly, is rarely disputed within cases. As such, the cases analysed in this article present a more weighted discussion on how the courts endeavour to establish whether the relevant conduct constituted a breach of care.

The *CLA* was introduced during a period of reform and shifted the determination

²⁸ Ibid.

²⁹ Ibid. The term 'de-implementation' has been increasingly used to term the movement away from ineffective and harmful medical practices. See Vinay Prasad and John PA Ioannidis, 'Evidence-Based de-Implementation for Contradicted, Unproven, and Aspiring Healthcare Practices' (2014) 9(1) *Implementation Science* 1.

³⁰ Verkerk et al (n 8) 738.

³¹ *Donoghue v Stevenson* [1932] AC 562.

³² *Civil Liability Act 2002* (NSW) s 5B ('CLA').

³³ (1992) 109 ALR 625, 629 (emphasis added).

of standard of care to be largely in reference to the practice of medical professionals.³⁴ The legislative framework for NSW governing the standard of care for professionals is found in section 50 of the *CLA*:

- (1) A person practising a profession ("a professional") does not incur a liability in negligence arising from the provision of a professional service if it is established that the professional acted in a manner that (at the time the service was provided) was widely accepted in Australia by peer professional opinion as competent professional practice.
- (2) However, peer professional opinion cannot be relied on for the purposes of this section if the court considers that the opinion is irrational.
- (3) The fact that there are differing peer professional opinions widely accepted in Australia concerning a matter does not prevent any one or more (or all) of those opinions being relied on for the purposes of this section.
- (4) Peer professional opinion does not have to be universally accepted to be considered widely accepted.³⁵

The law imposes a higher standard of care on professionals than that of an ordinary person, due to their special knowledge and skills. The level of expertise varies between general and specialist medical practitioners and as a result, there are varying the degrees of standard of care required at law.³⁶ Although the court has the ultimate discretion in determining the standard of care more often than not, the court will be guided by expert opinion. The inclusion of ‘widely accepted... professional opinion’ within the statute seeks to clarify the legal standard to be applied to professional opinion in order to negate the reliance on idiosyncratic opinions.³⁷ A second threshold is inscribed within the statute and provides for safeguards against relying on opinions in which the court considers to be irrational. This article will examine the application and interpretation of section 50 in greater detail in Part IV.

Prior to commencing diagnosis or treatment all practitioners, subject to certain exceptions such as emergencies, must receive informed consent from their patients.³⁸

³⁴ *Review of the Law of Negligence: Final Report* (Final Report, September 2002).

³⁵ *CLA* (n 33) s 50.

³⁶ *Rodgers v Whitaker* (n 34) 632.

³⁷ *Review of the Law of Negligence: Final Report* (n 34) 40.

³⁸ *Rosenberg v Percival* (2001) 178 ALR 577.

Patients hold the right to determine whether or not to undergo any form of treatment or test.³⁹ Accordingly, doctors have a duty to inform patients of all material risks and provide adequate advice and information.⁴⁰ Doctors must take all appropriate steps to facilitate a diagnosis and take notice of patient concerns. Doctors may be held liable for a missed or delayed diagnosis, however, the HCA has held a practitioner will not be held liable of a missed or delayed diagnosis that has caused the patient a loss of chance of a better medical outcome.⁴¹ This principle was formulated in *Tabet v Gett*.⁴² In that case, the HCA took into account the policy impacts that would occur if the burden of proof of causation was weakened.⁴³ Notably, two judges flagged the possibility of allowing individuals to succeed on such claims would encourage defensive medicine.⁴⁴

III METHOD: CASE LAW SEARCH AND SELECTION OF KEY CASES

This article seeks to better characterise the standard of investigation required by doctors to fulfil their duty of care. The focus here is on the *CLA* within NSW medical negligence case law. In particular, I am interested in how the courts strike a balance between under- and-over investigation of patients. I conducted a search for cases from 2011 to the present, which involved allegations of an erroneous or delayed diagnosis or treatment. This temporal restraint ensured that I focused on capturing judicial commentary post *Tabet v Gett*.⁴⁵ In doing so, this article will clarify medical practitioners' legal duties, in the hope of decreasing defensive medical practices and improving patient outcomes.

A Searches

The LexisNexis and Westlaw databases were searched from 2011 to now and within those searches, the 'cases' filter was applied to refine the search to cases involving allegations against practitioners for a delay or error in diagnosis or treatment. The jurisdictional restrictions on case selection were limited to the NSW Supreme Court

³⁹ *Wallace v Kam* (2013) 297 ALR 383, 386, [8].

⁴⁰ *CLA* (n 32) s 5P; *Rodgers v Whitaker* (n 33) 634–635.

⁴¹ *Tabet v Gett* (2010) 265 ALR 227.

⁴² *Ibid.*

⁴³ *Ibid* 264, [151].

⁴⁴ *Ibid* 243, [59], 252, [102].

⁴⁵ *Tabet v Gett* (n 42).

(‘NSWSC’) and NSW Court of Appeal (‘NSWCA’), as well as any relevant HCA cases.

Searches used the term ‘medical negligence’ and ‘delayed diagnosis’, as well as ‘medical negligenc*’ and ‘delay* diagnos*’ as keywords. These terms were then coupled with a range of phrases surrounding the central themes of delayed diagnosis, treatment, errors in investigation and duty of care.⁴⁶ Search terms were restricted to the headnote and catchword section in order to exclude interlocutory applications that were factually applicable to the topic area but lacked relevant or substantial judicial reasoning.

B *Selection Criteria*

All cases that alleged a delay or error in diagnosis or treatment were included. Of those cases, only the cases that provided a ‘substantial discussion’ on the legal duties and standard of investigation required by doctors were selected. ‘Substantial’ was given a liberal interpretation to include commentary which extended beyond mere reference and provided a substantive analysis of expert opinion and acceptable practice.⁴⁷ Interlocutory applications were excluded, as well as cases that focused on psychiatric injuries, complications arising from elective surgeries, and a failure to advise on the risks associated with medical treatment. Cases concerning a failure to refer were included if they also contained ‘substantial’ discussion on the standard of investigation. Through this process, 10 cases were deemed to be pertinent to the question sought to be addressed.

C *Coding*

This article provides a blend of doctrinal and qualitative analysis by distilling legal principles from case law and identifying key themes in the judicial reasoning relevant to the phenomenon of defensive practice and provision of low value care.⁴⁸ In addition to coding the factual aspects of each case (e.g. year, court level, medical field, outcome) each judgment was read to identify judicial commentary, *obiter dicta* and *rationes decidendi* of interest.⁴⁹ The dataset was categorised according to medical fields and the

⁴⁶ See Appendix A for more detailed search terms used.

⁴⁷ This definition was adapted from Vicki T Huang, ‘An Empirical Investigation of 20 Years of Trade Mark Infringement Litigation in Australian Courts’ 41(1) *Sydney Law Review* 105, 115.

⁴⁸ Terry Hutchinson and Nigel Duncan, ‘Defining and Describing What We Do: Doctrinal Legal Research’ (2012) 17(1) *Deakin Law Review* 83; Lisa Webley, ‘Qualitative Approaches to Empirical Legal Research’ in Peter Crane and Herbert M Kritzer (eds) *Oxford Handbook of Empirical Legal Research* (Oxford University Press) 927, 940.

⁴⁹ Huang (n 47) 117.

nature of the allegations. Through this process, the first dominant theme that emerged was analysing how the court sought to balance the standard of investigation in ambiguous clinical contexts. By dividing the dataset into defendants who were GPs and those who were specialists, judicial commentary and the application of legal principles was compared and synthesised to produce the second dominant theme. Finally, one secondary theme emerged whilst analysing the evidence used and relied upon to defend claims of negligence.

IV CASE LAW ANALYSIS: KEY FINDINGS

A Dataset Description

The dataset includes ten cases, five NSWCA cases and five NSWSC cases. Out of the five cases which went to an appellate court, three of the appellate judgments affirmed the trial decision in favour of the doctor and two appellate judgments reserved the trial decision in favour of the patient. In short, all five cases which went to an appellate court found no findings of negligence. Only two out of the five first-instance decisions in the sample found judgments in favour of the patient. Overall, doctors were successful in defending claims of negligence brought against them in eight of the ten cases.

Within the dataset, four of the defendants were specialists; five were GPs and two of the cases were brought against Local Health Districts as corporate bodies who had care, custody and management of the hospital (with one joining the GP as the second defendant). The dataset traverses a range of medical practices including general practice, emergency medicine, neurology, oncology, general surgery and obstetrics. Six cases involved a delay in treatment and four cases involved a delay in diagnosis. The allegations of negligence included a failure to administer an appropriate antibiotic regime, a failure to carry out a sufficient investigation, a failure to refer and a failure to correctly diagnose based on a scan or symptoms. Two cases concerned issues with patient compliance.

All judgments addressed arguments of breach and causation, however, seven of the cases were more heavily centered around establishing breach of care and three were more focused upon causation arguments. All cases included and relied upon extensive expert evidence. One case within the dataset was taken to an appellate court, to appeal the test of irrationality applied to the expert evidence by the primary judge. The other

appellate decisions focused on contesting the trial judge's findings of both breach and causation. With one case going before the court four times, excluding the proceeding for a retrial, the judiciary in each proceeding found judgment in favour of the doctor.

B *Thematic Analysis*

The first dominant theme concerns the duty bestowed on practitioners to investigate symptoms that are suspectable to more than one diagnosis. This theme canvases the difficulties encountered by doctors in unclear clinical situations and explores how the courts determine the standard of investigation required. The article will then turn to consider the second dominant theme, by exploring the differentiation in duties incumbent upon a GP in comparison to those of a specialist. This theme enlivens a discussion analysing the relationship between practitioners whilst also considering the role of patients. Lastly, the article will touch on the evidentiary matters used within legal proceedings. This secondary theme will enable readers to gain a more comprehensive understanding of how the limbs of a negligence claim are interpreted in case law.

1 *Symptoms that are Suspectable to More than One Diagnosis*

When a patient presents with symptoms that are suspectable to more than one diagnosis, the judiciary holds it to be unreasonable to impose a duty to investigate beyond the clinical features. The law supports practitioners who refrain from ordering further tests and procedures that would be invasive and of limited utility in the clinical context. Although there is a duty to investigate differential diagnoses, this is to be restricted to diagnoses that are plausible to the patient's history and symptoms. Differential diagnosis refers to the process of differentiating between one or more conditions which share similar symptoms.⁵⁰ When determining legal liability, the courts do not use hindsight bias against medical practitioners. Rather, they determine liability on the facts and circumstances that the practitioner was presented with.

(a) Key Indicators for Further Investigation

The law permits practitioners to investigate differential diagnoses when there are key indicators of a more sinister diagnosis. A number of decisions have considered the scope

⁵⁰ *Oxford Dictionary of English* (online at 31 May 2020) 'differential diagnosis'.

of this duty where certain clinical features are absent. In a 2015 NSWSC decision, *Smythe v Burgman (No 2)* (*'Smythe'*), a GP was found to be acting in accordance with acceptable practice when treating a patient's pain in her left foot.⁵¹ The case considered whether a GP ought to have diagnosed arterial ischaemia (a lack of blood flow due to an obstruction in the arteries), notwithstanding its atypical presentation. The patient saw the defendant on two separate occasions in which the left foot and lower leg pulse were checked and found to be present and normal. The defendant, during the initial consultation, incorrectly made a definitive diagnosis of infection and prescribed antibiotics. This incorrect diagnosis was reaffirmed during the second consultation with the defendant, as the plaintiff's foot appeared to be showing signs of improvement following the administration of antibiotics. In the ensuing days, the pain returned to the plaintiff's foot. Unable to meet with the defendant, the plaintiff arranged to go to another clinic, where she was diagnosed with gout. The plaintiff's condition ultimately worsened, and her left leg was amputated below the knee.

The Court held that the defendant owed the plaintiff a duty of care to exclude arterio-ischemia as a differential diagnosis.⁵² The experts all agreed that it was a *'fundamental principle of diagnosis'*:

that where a patient presents with symptoms that are susceptible of more than one diagnosis, any diagnosis with a lethal potential or serious morbidity risk should be established as a definitive diagnosis and treated or an attempt made to rule it out by establishing a valid alternative diagnosis.⁵³

The case focused on the factual scenario surrounding the first consultation and examination of the left foot and lower leg pulse.⁵⁴ If the pulse had been abnormal, the defendant 'would not, in the exercise of reasonable care, have been able to exclude the diagnosis without further investigation'.⁵⁵ However, as the pulse was normal, the Court held that further investigation was not warranted and there was no breach of duty.⁵⁶

⁵¹ [2015] NSWSC 298 (*'Smythe'*).

⁵² *Ibid* [113].

⁵³ *Ibid* [76].

⁵⁴ *Ibid* [113].

⁵⁵ *Ibid*.

⁵⁶ *Ibid*.

Based on the plaintiff's presentation, the Court placed an onus on the defendant to exclude arterio-ischemia, in the course of clinical investigation. This illustrates the Court's support for the '*fundamental principle of diagnosis*' advocated by the experts who gave evidence. An example of a key indicator given by these experts is a sudden stop of blood flow to the leg, foot or toes.⁵⁷ The Court accepted the expert evidence that patients presenting with symptoms of reduced blood flow but without evidence of complete blockage can be 'investigated and managed less urgently'.⁵⁸ This is what occurred in *Smythe* and the defendant was held to have complied with her duties, notwithstanding the incorrect diagnosis.

The Courts have also regarded colour change or pigmentation of a lesion on a patient's foot to be a key indicator for further investigation. This was demonstrated in *Cooté v Kelly; Northman v Kelly* ('*Cooté*'), a case concerning the delayed diagnosis of melanoma.⁵⁹ The defendant GP diagnosed and treated a lump on the sole of the plaintiff's foot as a plantar wart for 18 months. It was only revealed later in a biopsy that the lesion was, in fact, a malignant melanoma. Despite having the melanoma excised and treated, it had already metastasised and was fatal to Mr Cooté. The focus of the trial, retrial and subsequent appeal was the physical appearance of the lesion when the plaintiff attended numerous consultations with the defendant. It was established that if the lesion had a coloured or pigmented appearance, the defendant had an undoubted duty of care to refer the plaintiff for further investigation.⁶⁰ Indeed, the defendant himself, on numerous occasions in cross-examination, used the phrase 'red flag' and 'hallmark of melanoma' to describe a pigmented lesion.⁶¹

Ultimately, the defendant was not found negligent, as the evidence adduced by the plaintiff, that the lesion had a black spot on it during the first consultation, was held to be unreliable.⁶² On appeal, the appellant (Mr Cooté's Estate) sought to argue that the location of the lesion, which had been diagnosed as a plantar wart should have raised some concerns due to its atypical location. Whilst this argument was refuted by expert evidence, if the location of the plantar wart was atypical, the defendant would have been

⁵⁷ *Ibid* [110].

⁵⁸ *Ibid*.

⁵⁹ *Cooté v Kelly; Northman v Kelly* [2017] NSWCA 192 ('*Cooté*').

⁶⁰ *Ibid* [138].

⁶¹ *Ibid* [21], [23].

⁶² *Cooté v Kelly; Northman v Kelly* [2016] NSWSC 1447.

under an obligation to consider an alternative diagnosis.⁶³ A common thread in these cases highlights that reasonable care requires practitioners to rule out differential diagnoses when there are key indicators that suggest a more serious diagnosis and if they do so, they have complied with their duty, notwithstanding that their diagnosis may be wrong.

Further investigations are also necessary when practitioners have seriously or repeatedly considered a diagnosis.⁶⁴ This principle was illustrated in *Hirst v Sydney South West Area Hospital Service* ('*Hirst*'), in which an obstetrician was found negligent for not following through with an ultrasound to investigate an unstable lie during a mother's pregnancy.⁶⁵ An unstable lie is the frequently changing position of a fetus who is more than 36 weeks old. The plaintiff was born with hydrocephalus, and as a result is severely disabled. The plaintiff argued that because the defendant considered a possible diagnosis of an unstable lie, he should have ordered an ultrasound to investigate, which would have identified that the plaintiff was suffering from hydrocephalus.⁶⁶

The Court grounded its findings of negligence in examining the defendant's clinical records, which noted 'unstable lie' on three separate occasions. Further, on 2 October the notes recorded the word 'scan' with a question mark and placed a red dot on the patient's file, indicating the patient as high risk.⁶⁷ The Court held that the defendant made a 'provisional diagnosis on 27 September, confirmed it on 2 October, and was still concerned about it on 15 October'.⁶⁸ The Court stated, 'the issue of the case [was] not so much what he ought to have done but what he in fact did'.⁶⁹ The defendant breached his duty of care by failing to investigate a critical diagnosis that was contemplated on more than one occasion. The experts agreed that in '37 weeks and beyond (which the plaintiff was) if there is an unstable lie, investigations are necessary'. The defendant in *Hirst* breached his duty of care by failing to order the scan to determine the cause of the provisional diagnosis of an unstable lie. In contrast, the defendant in *Smythe* was not found negligent, as she undertook reasonable steps to reject the contemplated diagnosis of ischaemia. These decisions illustrate that a practitioner will be held liable for failing to

⁶³ *Coote* (n 57) [99].

⁶⁴ *Smythe* (n 51) [110].

⁶⁵ *Hirst v Sydney South West Area Health Service* [2011] NSWSC 664, [88] ('*Hirst*').

⁶⁶ *Ibid* [2].

⁶⁷ *Ibid* [58].

⁶⁸ *Ibid* [85].

⁶⁹ *Ibid*.

follow up or rule out critical differential diagnoses but only to the extent that it is reasonable for them to do so. Notably, when there is evidence that the practitioner seriously or repeatedly considered a diagnosis to be probable in light of demonstrated clinical features, there is a duty to further investigate.

(b) Evaluating Signs of Improvement

The Court in *Smythe* held that it was reasonable for the defendant GP to reaffirm her initial diagnosis after the second consultation, as the clinical impression was that the patient's foot had improved.⁷⁰ Expert evidence opined that one could infer that the improvement in the plaintiff's condition was due to a dissolution of a clot between those dates, which would have increased blood flow.⁷¹ However, this inference is only conceivable with the benefit of hindsight and thus would not have been a reasonable clinical finding at the time.⁷² The Court supported the diagnosis of infection 'at the time of the original assessment in light of the original physical findings'.⁷³ Specifically, the Court gave weight to the history given by the plaintiff and the appearance of the foot; which only showed some redness and tenderness, and the fact that the plaintiff reported no pain at the time.⁷⁴

In comparison, the NSWSC in 2017 held in *Tinnock v Murrumbidgee Local Health District* ('*Tinnock*') that, although a plaintiff was showing signs of improvement from time to time, the defendant breached his duty of care by failing to diagnose and treat the overt signs of infection more aggressively.⁷⁵ The plaintiff sued the defendant for injuries sustained from complications which arose from her surgery.⁷⁶ The plaintiff argued that the general surgeon, Dr Payne, failed to diagnose and treat the presence of infection caused by the surgical mesh.⁷⁷ Following the surgery on 7 June, the plaintiff was in and out of Wagga Wagga Base Hospital from 13 June to 16 July. During that time, the Court held that, by 13 June, the plaintiff was suffering from 'low-grade surgical

⁷⁰ Ibid [118].

⁷¹ Ibid [81].

⁷² Ibid.

⁷³ Ibid [78].

⁷⁴ Ibid [38].

⁷⁵ [2017] NSWSC 1003 ('*Tinnock*').

⁷⁶ Ibid [1].

⁷⁷ Ibid [7].

infection...that was not visible to the trained eye',⁷⁸ which by 3 July had evolved to overt signs of infection that demanded 'aggressive treatment'.⁷⁹

Contrary to *Smythe*, the doctor in *Tinnock* did not need the benefit of hindsight to acknowledge that the source of his patient's ongoing infection was the surgical mesh. Although the plaintiff was showing signs of improvement due to the strong course of antibiotics prescribed, the clinical features of the plaintiff on 3 July demanded further investigation.⁸⁰ The plaintiff in *Smythe* reported no pain and only mild tenderness and redness, whereas, the plaintiff in *Tinnock* had increased swelling, pain, redness and bloody discharge around her wound.⁸¹ What is elucidated from a comparison of these two cases, is that the Court only seeks to impose a duty to investigate the wavering of improvement of a patient when other clinical features suggest the initial diagnosis is unsound.

(c) Invasiveness and Utility of Further Procedures

The judiciary has sought to strike a balance between the over-and-under investigations of patients, by requiring the benefits to outweigh the harms before practitioners conduct further invasive procedures. In 2016, the NSWSC in *Rothonis v Lattimore* ('*Rothonis*'), found it reasonable for a cardiologist to refrain from further investigations, on the basis that they were invasive and unwarranted by the clinical context.⁸² The plaintiff was referred to the defendant after she suffered some disturbances in her vision and consciousness while driving.⁸³ The purpose of the referral was to ascertain whether some condition of the heart may have caused a clot to enter the blood supply to the brain and cause the suspected mild stroke.⁸⁴

Before the plaintiff's stroke that left her significantly disabled, she had consulted the defendant and other specialists. Upon the first consultation with the defendant, the plaintiff described no symptoms of a stroke or a transient ischemic attack ('TIA', minor stroke). The defendant carried out her usual practice of performing a physical

⁷⁸ Ibid [109].

⁷⁹ Ibid [124].

⁸⁰ Ibid [123].

⁸¹ Ibid.

⁸² [2016] NSWSC 1409, [96] ('*Rothonis*').

⁸³ Ibid.

⁸⁴ Ibid [8].

examination and electrocardiogram, both for which results were normal.⁸⁵ The plaintiff then underwent an MRI, in which the neurologist excluded the diagnosis of a stroke and reported that the plaintiff's symptoms were 'migrainous'.⁸⁶ The final test ordered by the defendant was to have the plaintiff's blood pressure monitored over 24 hours. The results were also normal. At this point, the defendant excluded the diagnosis of a stroke, as the patient's history and medical investigations did not reveal key indicators of a stroke. The defendant deemed it unreasonable to subject the plaintiff to further invasive procedures such a transesophageal echocardiogram when the symptoms and neurology report did not support such actions. The Court held the defendant 'acted with reasonable care' when she determined there 'was no clinical indication for an intrusive study' to be conducted on the plaintiff.⁸⁷ This supports the proposition that a practitioner is only to undertake further invasive investigations when the benefits of reaching a conclusive diagnosis outweigh the harms of further tests and procedures.

In *Rothonis and Makaroff v Nepean Blue Mountains Local Health District*, (*Makaroff*) both medical practitioners successfully defended negligence claims by arguing further investigation would have been too invasive or of limited utility.⁸⁸ In *Makaroff*, the plaintiff alleged the defendants failed to conduct appropriate tests and provide adequate information, which delayed the diagnosis and treatment of a rotator cuff tear, resulting in permanent damage to her shoulder.⁸⁹ The plaintiff alleged her GP denied her access to specialist orthopedic care by failing to refer her to the emergency department during their four consultations. The Court held the GP was not negligent as a referral to the emergency department 'would have been of no utility'.⁹⁰ The plaintiff reported her 'symptoms were much improved' and referral to an emergency department was not warranted. The Court accepted the expert evidence that had she been sent to the emergency room, she would have been sent home.⁹¹ When patients are referred to the hospital as an outpatient without overt symptoms and reasonable cause, they will be sent back to their GPs, creating a cycle that wastes resources, time and money. This process

⁸⁵ Ibid [11].

⁸⁶ Ibid [46].

⁸⁷ Ibid [84].

⁸⁸ *Rothonis* (n 82); [2019] NSWSC 715 (*Makaroff*).

⁸⁹ *Makaroff* (n 88) [17].

⁹⁰ Ibid [341], [361].

⁹¹ Ibid [341].

was described as ‘a revolving door’.⁹² These cases reveal that doctors will not be held liable for refraining from conducting tests, procedures and issuing referrals when the patient’s symptoms are not overt, urgent or warrant such action.

2 *Clarifying Legal Duties of Practitioners and Patients*

The court acknowledges the differing degree of expertise of a GP and a specialist in the reasoning and assignment of liability. Secondly, when determining liability, the courts consider the actions of the patient.

(a) Legal Duties of Practitioners

The court attempts to strike a balance between under-and-over investigation by creating a clear limit on the legal duties and expectations of practitioners and their role in patient management. The court holds it to be reasonable and sound practice for a specialist to act upon another specialist’s diagnosis of symptoms and disorder when it is in the latter specialist’s field.⁹³ This principle was distilled in *Rothonis*, in which the Court considered not whether the defendant cardiologist was “bound to accept” the neurologist’s diagnosis, ‘but whether it was a reasonably careful discharge of her duty as a specialist to do so’.⁹⁴ As above, once the neurologist diagnosed the symptoms as migrainous and the defendant’s tests suggested nothing to the contrary, the diagnosis of a stroke was reasonably excluded. The plaintiff argued the defendant ‘acted with less than reasonable care in relying upon’ the neurologist’s ‘exclusion of a stroke because’ she had done so proceeding ‘upon the assumption that the patient’s heart was normal’.⁹⁵ His Honour rejected this argument submitting that ‘it inverts science’.⁹⁶ Accordingly, Fagan J stated ‘such scepticism with respect to the opinion of another consultant who is more specialised in relation to the medical issue at hand is not required, by way of abundant caution or otherwise, for the exercise of reasonable care’. Moreover, Fagan J noted ‘such scepticism’ could lead to unnecessary further tests, procedures and interventions, ‘all of which would carry their own risks for the patient’.⁹⁷ The court recognises all interventions carry risks and therefore hold it to be unreasonable for practitioners to carry

⁹² Ibid [272].

⁹³ Ibid [53].

⁹⁴ Ibid [57].

⁹⁵ Ibid [63].

⁹⁶ Ibid [64].

⁹⁷ Ibid.

out their own investigations for the sole purpose of validating other specialists' findings.

The NSWCA distinguished the legal duties of a specialist and that of a GP in *Varipatis v Almario* ('*Varipatis*').⁹⁸ The Court's distinction focused on the duty of a GP in 1998, to refer a morbidly obese patient to a bariatric surgeon.⁹⁹ The trial judge held that a reasonable GP would have issued the referral and embarked upon a more 'dramatic or robust intervention',¹⁰⁰ given the patient's history of failed attempts to lose weight using conservative methods.¹⁰¹ The NSWCA, disturbed the primary judge's findings in respect to the plaintiff's negligence claim. The Court found that it was not usual practice in 1998 for specialists, such as hepatologists or endocrinologists to refer patients for bariatric surgery. They stressed 'there [was] no basis to impose a *greater duty* on a GP' to do so.¹⁰² Meagher JA noted that, 'the benefits and complications of bariatric surgery were controversial and not scientifically proven or well understood' at the material time.¹⁰³ It would have been unreasonable to impose a duty on GPs to recommend the procedure given its novelty.

The distinction between specialists and GPs was similarly highlighted in *Smythe*.¹⁰⁴ The Court in *Smythe* did not hold a GP negligent for not using a more advanced medical device, even though the relevant machine would have provided a more reliable screening of the plaintiff's injury.¹⁰⁵ The experts held the 'technique to be highly specialised ...*which one would not expect a GP to have*'.¹⁰⁶ These cases reveal the Court's acknowledgment of the different standards of care that are to be deployed in accordance with the differing levels of expertise that exist throughout the medical profession.

The trial judge in *Varipatis*, additionally found the GP negligent in failing properly to advise him of the cause of his liver disease and other health problems. The trial judge submitted 'patients are ultimately entitled to make their own decisions about treatment', however, there are circumstances that require a 'more proactive involvement' from doctors.¹⁰⁷ This stance was not supported by the NSWCA. The Court held that

⁹⁸ [2013] NSWCA 76 (*Varipatis*).

⁹⁹ *Ibid*, [4].

¹⁰⁰ *Almario v Varipatis (No 2)* [2012] NSWSC 1578, [93].

¹⁰¹ *Ibid* [91].

¹⁰² *Varipatis* (n 98) [59] (emphasis added).

¹⁰³ *Ibid* [108].

¹⁰⁴ *Smythe* (n 51).

¹⁰⁵ *Ibid* [84].

¹⁰⁶ *Ibid* (emphasis added).

¹⁰⁷ *Ibid* [96].

GPs ‘*may be obliged to...advise...weight loss is necessary... to discuss the means by which that may be achieved...offer referrals to appropriate specialists or clinics*’.¹⁰⁸ However, there is indeed no obligation or power for GPs to do anything beyond this.¹⁰⁹ The Court found the appellant had taken ‘active steps’ and ‘did more than simply ‘make the option [of such treatment] known to’ the plaintiff.¹¹⁰ Notably, the plaintiff was referred on two occasions to see a specialist in obesity management.¹¹¹ Although the appellant continued to stress the importance of attending the referrals and or engaging with other weight loss methods, the plaintiff declined to act on the advice given.¹¹² Accordingly, the Court held ‘there was no point in providing him with a further referral’,¹¹³ and that ‘the duty of care stopped short of requiring an exercise in futility’.¹¹⁴ The court deems it is unreasonable to impose a burden upon practitioners to re-refer patients in circumstances when a patient has ignored prior referrals or indicates that they do not propose to act on them.¹¹⁵

(b) Clarifying the Role of Patients

Courts do not determine a practitioner's liability in a vacuum. Rather, case law highlights that patients’ actions and inactions will also be scrutinised when considering whether practitioners have properly discharged their duty of care. Two notable examples are *Varipatis* and *Ngo v Elysee* (‘*Ngo*’).¹¹⁶ In both cases the plaintiffs were successful at first instance, however, were both turned over on appeal, with significant weight being ascribed to the patients’ non-compliance with advice and referrals. In *Ngo* the plaintiff alleged that his GP, Dr Ngo failed to refer him to a renal specialist when the test results warranted further investigation.¹¹⁷ The delay was alleged to have accelerated his kidney disease. As stated above, in *Varipatis*, the plaintiff alleged his GP was negligent in failing to refer him to a bariatric surgeon, resulting in the acceleration of his liver disease. There are similarities between both cases. Notably, both plaintiffs advanced arguments that their GPs failed to issue referrals, and as such there was a delay in treatment of their

¹⁰⁸ *Varipatis* (n 98) [38] (emphasis added).

¹⁰⁹ *Ibid.*

¹¹⁰ *Ibid* 114.

¹¹¹ *Ibid* [25]–[30].

¹¹² *Ibid* [113].

¹¹³ *Ibid* [114].

¹¹⁴ *Ibid* [38].

¹¹⁵ *Ibid* [114].

¹¹⁶ [2019] NSWCA 76 (*Ngo*).

¹¹⁷ *Ibid* [16].

chronic diseases. Moreover, evidence emerged in both cases that showed a history of non-compliance with medical advice and attending referrals issued by their GPs.¹¹⁸

The NSWCA in *Varipatis*, held the GP had exhausted his options in treating the patient and therefore did not seek to impose a greater duty than had already been exercised. This approach was similarly taken by the NSWCA in *Ngo*.¹¹⁹ The Court rejected the trial judge's findings on breach, in establishing the plaintiff had a pattern of non-compliance. McCallum JA stated 'there is no basis for inferring that, against a history of failure to follow up referrals to specialists and non-compliance with his medication, Mr Elysee would on this occasion have conducted himself in such a way'.¹²⁰ The plaintiff's history 'was an important issue' within the appeal,¹²¹ specifically in establishing causation. The judges held even if the GP had breached his duty of care by failing to refer the plaintiff, the claim would fail, as the plaintiff would not have been able to demonstrate, in light of his history, that he would have attended the referral to the renal specialists and received earlier treatment. These cases reveal the increased recognition of patient responsibility and a reluctance to endorse medical paternalism.

3 *Evidentiary Matters*

Expert opinion plays a pivotal role in establishing competent professional practice. When determining whether a defendant's actions fall below the standard of care, courts are often guided by medical experts and evidence-based guidelines. In addition to establishing a breach, the plaintiff will need to prove the error or delay in diagnosis caused them harm. This is often a complex task undertaken by the judiciary and provides insight into the inherent difficulties faced by plaintiffs in proving a claim in medical negligence.

(a) *Use of Guidelines*

The judicial acceptance and reliance on medical guidelines to establish acceptable practice, signifies the importance for practitioners to use recommended guidelines in their delivery of health care. This principle was apparent in the 2018 NSWCA judgment of

¹¹⁸ *Varipatis* (n 98) [1]; *Ngo* (n 116) [13].

¹¹⁹ *Ngo* (n 114).

¹²⁰ *Ibid* [131].

¹²¹ *Ibid* [109].

South Western Sydney Local Health District v Gould.¹²² The trial judge found the defendant negligent in failing to ‘administer a proper antibiotic regime’, specifically failing to administer an additional antibiotic drug the evening of the plaintiff’s admission to hospital.¹²³ The appellant was found liable at first instance, as the trial judge rejected Professor Gatus’ evidence which held the appellant had acted in accordance with widely accepted practice, because the *Therapeutic Guidelines - Antibiotic Book* did not recommend the administration of additional antibiotics. The trial judge preferred the evidence of Dr Raftos as it was not ‘predicated upon articles, or guidelines that required interpretation’, and rather was based upon ‘his training, experience and knowledge of contemporary standards of practice in 2011’.¹²⁴

The NSWCA found the trial judge erred in his findings that Professor Gatus’ opinion was irrational, ‘both because it was procedurally unfair, and because his Honour applied the wrong legal test’.¹²⁵ The Court stated ‘evidence merely justifying an alternative approach’ does not render the opinion irrational.¹²⁶ The Court reached the ‘conclusion that the practice stated in the Therapeutic Guidelines – Antibiotic was widely held across Australia’,¹²⁷ and thus was a “practice” capable of engaging s 5O CLA.¹²⁸

Professor Gatus in cross-examination pressed the importance of following the Therapeutic Guidelines, stressing ‘we’re trying to get the use of antibiotics down- the inappropriate use’.¹²⁹ Professor Gatus advocated for antibiotic stewardship, a program aimed to measure and improve how antibiotics are prescribed.¹³⁰ The trial judge regarded these comments as “misdirected” and “overstated” and not appropriate to the defendant’s discharge of duty of care.¹³¹ Leeming JA succinctly summarised the essence of the dispute as:

¹²² (2018) 97 NSWLR 513 (*Gould*).

¹²³ *Ibid* 517, [13].

¹²⁴ *Gould v South Western Sydney Local Health District* [2017] NSWDC 67, [395].

¹²⁵ *Gould* (n 122) 522, [39].

¹²⁶ *Ibid* 518, [7].

¹²⁷ *Ibid* 538, [101].

¹²⁸ *Ibid* 538, [102]; CLA (n 31) s 5O.

¹²⁹ *Gould* (n 122) 526, [59].

¹³⁰ *Ibid*.

¹³¹ *Gould v South Western Sydney Local Health District* (n 122) [108].

One which distinguished between the specific antibiotic needs of an individual with epidemiological principles of antibiotic stewardship...Such choices, between the immediate interests of the individual and the broader interests of the community, recur throughout the field of medicine.¹³²

The Court ultimately accepted the opinion of Professor Gatus and deemed it unnecessary in accordance with the guidelines to consider the administration of further antibiotics.¹³³ The acceptance of this evidence symbolises the judicial support for guidelines that aim to reduce the unnecessary administration of medical services, when clinically unwarranted. This notion is further enhanced when compared to the antibiotic regime dispensed in *Tinnock*, that was not in accordance with any specific guidelines.¹³⁴ As discussed above, the surgeon in *Tinnock* was found liable for not undertaking a more aggressive treatment when there were overt signs of infection. These two cases highlight the importance of using guidelines to manage infection, to ensure practitioners are meeting the legal standard of care required.

Additionally, in *Rothonis* the American Heart Association and American Stroke Association Guidelines (AHAASA Guidelines) were relied upon by the defendant to establish a defence under s 50 of the *CLA*.¹³⁵ More specifically, the guidelines were used to defeat the plaintiff's causation arguments. The plaintiff alleged the cardiologist failed to carry out a sufficient investigation, alleging that, had the defendant investigated further, she would have discovered the plaintiff had a patent foramen ovale ('PFO') (a hole in her heart). This discovery would have led to the defendant closing the PFO thereby negating the chances of the plaintiff suffering a stroke. The defendant relied on the AHAASA Guidelines, which advocated against PFO closures in the absence of a history of stroke, which was the case for the plaintiff.¹³⁶ Therefore, even if the PFO was discovered, it would not have been reasonable for the defendant to proceed with the closure.¹³⁷ His Honour accepted the defendant's evidence, stating the guidelines as "authoritative and appropriate" to be followed, further representing 'sound cardiological

¹³² *Gould* (n 122) 534, [98].

¹³³ *Ibid* 534, [100].

¹³⁴ *Tinnock* (n 75).

¹³⁵ *Rothonis* (n 82) [113]; *CLA* (n 34) s 50.

¹³⁶ *Rothonis* (n 82) [114].

¹³⁷ *Ibid* [117].

practice'.¹³⁸ These cases create a strong precedent for practitioners to defend claims of negligence, by establishing they applied and interpreted a patient's symptoms and histories in line with well-established clinical guidelines.

(b) Establishing Causation

For a patient's negligence claim to succeed they must establish that the breach caused loss or damage. The causal link can often be hard to establish, as it can require the judiciary to embark upon a hypothetical fact-finding mission.¹³⁹ This was illustrated in *Coote*, in which the plaintiff in three separate proceedings failed to establish causation. Mr Coote needed to prove that a melanoma existed during his consultations with the defendant, but had not yet metastasised.¹⁴⁰ Basten JA stated 'the claim needed to chart a narrow course in order to succeed'.¹⁴¹ His Honour considered the 'hypothetical exercise required in order to determine whether causation was established was inappropriate',¹⁴² the experts agreed and commented that it 'was not possible'.¹⁴³

This was also the case for the plaintiff in *Paul v Cooke*, in which a radiologist was found to have breached his duty of care by failing to diagnose an aneurysm.¹⁴⁴ However, as the plaintiff was unable to establish causation, the defendant was not held liable for the adverse outcomes of the operation which left the plaintiff with severe injuries. As the aneurysm had not grown or changed in shape over the course of the three-year delay in diagnosis, the risk of harm was materially unchanged.¹⁴⁵ The judicial findings held the 'risk of intraoperative rupture was always present and could not with reasonable care and skill be avoided' once the patient elected to have the surgery.¹⁴⁶ These cases reveal even though a practitioner can be found to have breached their duty of care, if the causal link is not established, the claim will ultimately fail.

¹³⁸ Ibid [114].

¹³⁹ *Coote* (n 59) [133].

¹⁴⁰ Ibid [127].

¹⁴¹ Ibid [124].

¹⁴² Ibid [133].

¹⁴³ Ibid [127].

¹⁴⁴ *Paul v Cooke* (2013) 85 NSWLR 167.

¹⁴⁵ Ibid 184, [75].

¹⁴⁶ Ibid.

V DOCTORS' DUTY TO STRIKE A BALANCE BETWEEN UNDER-AND-OVER INVESTIGATION OF PATIENTS

It is arguable that at the root of defensive medical practice is an exaggerated fear of the law however, in light of the preceding analysis, these fears are found to be misplaced. An examination of the literature evidences a fear driven bias held by practitioners towards over investigation.¹⁴⁷ However, the cases discussed in this article highlight the judiciary's continuing support for doctors to exercise their professional judgment and refrain from subjecting patients to unnecessary medical interventions. As such, the case law analysis is helpful to counter defensive medical practices by enlightening doctors of their legal duties and standard of care.

For practitioners to reduce defensive practices, a cultural shift within the industry is required so that an appropriate balance of investigation is established which will ensure the harms do not outweigh the benefits. The implementation of evidence-based guidelines will reduce practitioners' fear of litigation, by providing a standard of acceptable practice that can be successfully relied upon to defend allegations of negligence.¹⁴⁸ Greater clarity and understanding of what the law expects of doctors will enable them to modify their behaviour to de-implement practices that may harm patients. Commentators suggest improved communication between doctors and patients through employing a model of shared decision making ('SDM') which will reduce the risk of disputes.¹⁴⁹

A *Requirement for Benefits to Outweigh the Harms*

The current 'status quo' of the medical industry is more willing to risk harms arising from over intervention than from no intervention at all.¹⁵⁰ Such a position is not supported by the courts. The law requires practitioners to establish that the benefits outweigh the harms before embarking upon further investigations. The literature provides 'mounting

¹⁴⁷ Scott et al (n 5) 408.

¹⁴⁸ Jonathan Davies, 'Clinical Guidelines as a Tool for Legal Liability. An International Perspective' (2009) 28(4) *Medicine and law* 603, 603; RA Fearnley, MDD Bell and AR Bodenham, 'Status of National Guidelines in Dictating Individual Clinical Practice and Defining Negligence' (2012) 108(4) *BJA: British Journal of Anaesthesia* 557, 560.

¹⁴⁹ Jennifer Schulz Moore, Michelle M Mello and Marie Bismark, "'Poking the Skunk": Ethical and Medico-Legal Concerns in Research about Patients' Experiences of Medical Injury' (2019) 33(8) *Bioethics* 948, 955; Ries (n 4) 288.

¹⁵⁰ *Ibid.*

evidence' of the harms occurring from unnecessary treatments and overdiagnosis, which stem from practitioners' intuitive belief in early detection, overestimation of the benefits and fear of litigation.¹⁵¹ These findings highlight the need for a cultural shift within the medical field away from thinking 'more is better'.¹⁵² Practitioners need to be aware actions that are undertaken for defensive purposes can increase their risk of being sued.

Researchers have begun to qualify the harms arising from over intervention, revealing the flaws within the current culture of medicine.¹⁵³ Doctors need to pay more attention to these harms and recognise more is not better. A study conducted across NSW hospitals by Badgery-Parker and colleagues reported up to 15% of all low-value care procedures they identified resulted in hospital-acquired complications.¹⁵⁴ These findings mean one in sixteen individuals admitted for a low-value care procedure suffered some form of hospital-acquired complication.¹⁵⁵ An additional study reported that twenty-seven low-value care procedures in NSW public hospitals between 2016-2017 amounted to over \$49 million in costs.¹⁵⁶ These findings highlight the need for practitioners to strike a balance between the under-and-over investigation of patients. The judicial findings establish the law does not encourage doctors to embark upon an endless stream of tests and procedures. Rather, the law seeks to mediate the under-and-over investigation of patients by requiring practitioners to identify a clear benefit before pursuing further investigations.

The judicial recognition of the risks associated with interventions reinforces the importance for practitioners to consider the invasiveness of medical treatments. To shift practices within the industry to accord with legal expectations, doctors need to utilise industry initiatives to tailor their behaviour away from ineffective and harmful medical practices.¹⁵⁷ Choosing Wisely and EVOLVE are among the many physician-led initiatives that provide practitioners with specialty specific lists to support clinicians responsibly and safety 'phase out' low-value care.¹⁵⁸ Academics have also joined the

¹⁵¹ Moynihan, Doust and Henry (n 18) 3506; Scott et al (n 4) 408; Ries (n 4) 212.

¹⁵² Moynihan, Doust and Henry (n 18) 3506.

¹⁵³ Tim Badgery-Parker et al, 'Measuring Hospital-Acquired Complications Associated with Low-Value Care' (2019) 179(4) *JAMA Internal Medicine* 499, 502.

¹⁵⁴ *Ibid* 502.

¹⁵⁵ *Ibid*.

¹⁵⁶ Tim Badgery-Parker et al, 'Low-Value Care in Australian Public Hospitals: Prevalence and Trends over Time' (2019) 28(3) *BMJ Quality & Safety* 205, 207.

¹⁵⁷ Karen Born, Tijn Kool and Wendy Levinson, 'Reducing Overuse in Healthcare: Advancing Choosing Wisely' (2019) 367 *BMJ* 16317, 1.

¹⁵⁸ Royal Australasian College of Physicians, 'Evolve' <<https://evolve.edu.au/>>; Choosing Wisely Australia

movement. The British Medical Journal has developed their own campaign ‘Too much medicine’, which collates and publishes relevant literature series on the key themes of low-value care, with the vision of ‘finding a solution to too much medicine’.¹⁵⁹ By creating forums that centralise information and strategies to combat low-value care, there is a greater chance that the sector wide behaviour that prevents the overuse of procedures and treatments for defensive purposes can be cultivated and assimilated on an international scale.

B *The Benefits of Using Evidence-based Guidelines*

Liability is not incurred for actions that are ‘widely accepted’ to be ‘competent professional practice’.¹⁶⁰ The judicial findings illustrate the court’s approval for practitioners to defend allegations of negligence, by providing evidence that their actions accorded with well-established medical guidelines. Acceptable practice is in a constant state of evolution due to the consistent output of medical advancements.¹⁶¹

Commentators suggest that the use of evidence-informed guidelines will alleviate practitioners’ fears of litigation, by providing a ‘normative standard’ and benchmark for acceptable practice.¹⁶² The case law revealed the importance for doctors to interpret a patient’s history and symptoms in light of current guidelines. The judiciary support doctors decisions to refrain from further investigations and treatments when well-established guidelines do warrant further action. To address widespread defensive medical practices that result in harms to patients, practitioners need to implement evidence-based guidelines.

Guidelines have played a ‘subsidiary role’ in evaluating and determining acceptable practice, by acting as a tool to inform the court of industry standards.¹⁶³ Guidelines are evidence-based statements that provide recommendations and criteria regarding treatment, diagnosis and management.¹⁶⁴ Such guidelines are designed to aid practitioners’ decision-making however there exists limits to their application.¹⁶⁵ Whilst

(n 1).

¹⁵⁹ The British Medical Journal, ‘Too Much Medicine’ <<https://www.bmj.com/too-much-medicine>>.

¹⁶⁰ *CLA* (n 32) s 50.

¹⁶¹ Fearnley (n 148) 559.

¹⁶² Davies (n 148) 603; Fearnley, Bell and Bodenham (n 148) 560.

¹⁶³ Davies (n 148) 604.

¹⁶⁴ *Ibid.*

¹⁶⁵ Panella et al (n 5) 215.

guidelines are not to be applied slavishly in a manner that substitutes practitioner discretion,¹⁶⁶ it is also argued any digression from guidelines must be justified as being acceptable practice within the industry.¹⁶⁷

The need to implement evidence-based guidelines is especially relevant to the prescribing of antibiotics. The overuse of antibiotics has caused an international crisis of antibiotic resistance both within high and low-income countries, which has led to an industry-wide push for antibiotic stewardship.¹⁶⁸ Studies report approximately 25,000 people die in Europe annually from antibiotic-resistant organisms and nearly 23,000 in the U.S.A.¹⁶⁹ When physicians prescribe antibiotics in circumstances where patients present no specific symptoms or serve clinical presentation, they are exposing patients to broader harms of antibiotic resistance.¹⁷⁰ This further fuels the misallocation of resources with the medical field. Incorporating evidence-informed guidelines into doctor's practices will benefit the patients as well as reduce doctor's legal liability.

The large breadth of guidelines available has contributed to issues arising from inconsistent recommendations.¹⁷¹ Consequently, doctors have reported a heightened fear of litigation and a concern that following one such established guideline may expose them to liability.¹⁷² However it must be stressed, when the court undertakes to establish 'widely' accepted competent professional practice, they do not construe this to mean 'universally accepted'.¹⁷³ Therefore, doctors are able to rely on different evidence-based guidelines, as long as it is established they have acted in accordance with competent professional practice under section 5O. In light of this, it is imperative both the court and doctors exercise caution in their application of clinical guidelines.¹⁷⁴

¹⁶⁶ Davies (n 148) 610.

¹⁶⁷ Fearnley, Bell and Bodenham (n 148) 560.

¹⁶⁸ Shannon Brownlee et al, 'Evidence for Overuse of Medical Services around the World' (2017) 390(10090) *Lancet* 156, 160.

¹⁶⁹ Andrew Y Hwang and John G Gums, 'The Emergence and Evolution of Antimicrobial Resistance: Impact on a Global Scale' (2016) 24(24) *Bioorganic & Medicinal Chemistry* 6440, 6440.

¹⁷⁰ Timo Smieszek et al, 'Potential for Reducing Inappropriate Antibiotic Prescribing in English Primary Care' (2018) 73(2) *Journal of Antimicrobial Chemotherapy* 36, 37.

¹⁷¹ Allen Kachalia and Michelle M Mello, 'Breast Cancer Screening: Conflicting Guidelines and Medicolegal Risk' (2013) 309(24) *JAMA* 2555.

¹⁷² Karsten Juhl Jørgensen and Peter C Gøtzsche, 'Breast Cancer: Updated Screening Guidelines - Much Ado about Small Improvements' (2016) 13(3) *Nature Reviews Clinical Oncology* 139, 139.

¹⁷³ *CLA* (n 32) s 5O(4).

¹⁷⁴ Commentators argue clinical guidelines have been tainted from involvement of large pharmaceutical companies. See Kale and Korenstein (n 17) 2825; Jørgensen and Gøtzsche (n 172) 140.

C *The Need to Increase Shared Decision Making*

Patient behaviour has become increasingly relevant in determining whether a doctor has breached their duty of care. Studies report effective communication between patients and doctors may decrease the impetus for patients to pursue legal action.¹⁷⁵ This is founded on research that argues a key driver in healthcare complaints has been attributed to poor communication and reports of patients feeling unheard.¹⁷⁶ Commentators have suggested practitioners' fears of litigation will be alleviated by implementing a model of SDM, to strengthen communication between patients and doctors.¹⁷⁷ SDM shares the same principles governing informed consent and risk warnings, in that it empowers patients to jointly make their healthcare decisions with their clinicians by engaging in more informed conversations.¹⁷⁸

The literature affirms patients are placing more value in the conversations they have with their doctors.¹⁷⁹ Further, are less inclined to proceed with unnecessary tests and procedures when learning of the risks and harms associated with low-value care.¹⁸⁰ In order for practitioners to strike a balance between under-and-over investigation, they need to ensure they are tailoring healthcare services to align with patient preferences and values.¹⁸¹ By increasing communication between doctors and patients, a shared understanding and awareness of the risks associated with treatments will be ascertained.

The court is reluctant to view patients as 'uninformed and incapable of understanding medical matters'.¹⁸² There is a push from within the industry, as well the judiciary, to encourage patients to be more proactive in the management of their own healthcare.¹⁸³ The cases discussed within the article highlight examples where obdurate patient non-compliance limits a doctor's duty of care. The law imposes an obligation for

¹⁷⁵ Jennifer Schulz Moore, Michelle M Mello and Marie Bismark, "'Poking the Skunk": Ethical and Medico-Legal Concerns in Research about Patients' Experiences of Medical Injury' (2019) 33(8) *Bioethics* 948, 955; Ries (n 4) 288.

¹⁷⁶ Moore, Mello and Bismark (n 175) 953.

¹⁷⁷ Ries (n 4) 228.

¹⁷⁸ Kirsten J McCaffery et al, 'Walking the Tightrope: Communicating Overdiagnosis in Modern Healthcare' (2016) 352 *British Medical Journal* i348.

¹⁷⁹ Moore, Mello and Bismark (n 175).

¹⁸⁰ Tammy C Hoffmann and Chris Del Mar, 'Patients' Expectations of the Benefits and Harms of Treatments, Screening, and Tests: A Systematic Review.' (2015) 175(2) *JAMA internal medicine* 274, 824.

¹⁸¹ Verkerk et al (n 8) 738.

¹⁸² *Montgomery v Lanarkshire Health Board* [2015] UKSC 11, [76].

¹⁸³ Choosing Wisely Australia, 'Consumers and Carers: Starting a Choosing Wisely Conversation', *Choosing wisely* <<https://www.choosingwisely.org.au/resources/consumers-and-carers/conversation-starter-kit>>.

patients to take an active role alongside their doctor in participating in their health care decisions. The ‘Conversation Starter Kit’ was launched in 2019 and provides patients with the resources and guidance to facilitate more informed discussions with their practitioners.¹⁸⁴ Both patients and practitioners need to strike a balance between under-and-over investigation by engaging in more informed conversations to achieve better health outcomes for patients.

VI CONCLUSION

For doctors to fulfil their duty of care, they must strike a balance between the under-and-over investigation of patients and only proceed to investigate when there are key indicators of a more serious diagnosis and a clear benefit is identified. The emerging body of case law highlights the reluctance of the judiciary to endorse defensive medical practices. This article contends a transformation needs to occur whereby doctors heedfully acknowledge the harms arising from over investigation. Further, doctors need to improve on clinical decisions by using evidence-based guidelines and techniques of SDM.

The insights derived from the body of case law should be used to inform both legal and medical practitioners of what the law expects from doctors in circumstances of heightened legal and medical ambiguity. As such, medicolegal defence organisations such as AVANT and MDA National, along with industry initiatives such as Choosing Wisely and EVOLVE, are be important outlets for disseminating this information. Medical practitioners seeking to gain a more comprehensive understanding of their legal duties are provided no comfort by simply reading section 50 of the *CLA*. The provisions of the *CLA* are only properly understood through an examination of a body of case law. This article’s use of both doctrinal and qualitative methodologies enables key principles to be extracted and applied to the broader issues of contemporary healthcare. This research most importantly, provides insight into how the courts adjudicate the standard of care in medical situations where doctors must strike a balance between over-and-under investigation.

¹⁸⁴ Ibid.

VII APPENDIX

A. Search terms

"medical negligen*" "delayed" diagnosis AND "investigation" symptoms

"medical negligen*" AND "error" "treatment" "diagnosis"

"medical negligen*" misdiagnosis AND delay

"medical negligen*" AND "alleged failure to diagnose" OR "breached duty in diagnosis and treatment"

("medical negligen*" AND "delayed" AND diagnosis) AND Judgment Date(Between 01/01/2011 AND 26/02/2020) + (Court("New South Wales Court of Appeal" OR "Supreme Court of New South Wales"))

"medical negligen*" AND "Failure" OR "Breach" AND proper examination OR patient history OR test diagnosis OR facilitate a diagnosis OR monitor and review diagnosis OR misdiagnosis

(catchwords(medical negligence AND delayed diagnosis OR diagnosis Or treatment) or case-summary(medical negligence AND delayed diagnosis OR diagnosis Or treatment))

Free Text("medical negligence" & "delayed" & diagnosis & "investigation" & symptoms) + (Jurisdiction("New South Wales")) + (Content Type("Cases")) + (Judgment Date ("2019" OR "2018" OR "2017" OR "2016" OR "2015" OR "2013" OR "2012" OR "2011"))
WestLaws = 19 cases

"medical negligence" AND "failure" OR "breach of duty" AND proper examination OR test OR appropriate steps to facilitate a diagnosis OR monitor and review diagnosis OR misdiagnosis

"medical negligence" AND failure to carry out a proper examination OR failure to take an appropriate history OR failure to take notice of the patient's concerns OR failure to test or to take appropriate steps to facilitate a diagnosis OR failure to monitor and review diagnosis OR misdiagnosis

delayed diagnos* (catchwords(Negligence — Duty of care) or case-summary(Negligence — Duty of care))

defensive medic* delayed diagnos* and (catchwords(Negligence — Duty of care) or case-summary(Negligence — Duty of care))

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