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Abstract

Defensive medicine has been practiced for decades in one form or another. It has only become the subject of professional and community scrutiny over the past two decades as it has become more widespread. As a result, concerns regarding its effect on the quality and cost of healthcare have been raised. Several definitions have been published all of which relate to the deviation from accepted medical practice in an endeavor, deliberate or otherwise, to minimize the chance of a medical malpractice claim. These deviations include ordering unnecessary special investigations (assurance behavior) or distancing oneself from or avoiding some clinical situations (avoidance behavior). Defensive medicine is inextricably interwoven with the subject of clinical risk management. Litigation risk can be significantly reduced by good communication not only with the patient and family but also with other healthcare practitioners, keeping good clinical notes, careful follow-up, and showing that you care.

Introduction

Defensive medicine is not new. It has been practiced for decades, and although it has been of concern in some quarters of the medical community for years, it has only emerged as a subject of public and political concern over the past 15–20 years.

Most doctors will recall graduating from medical school and the first few years as interns and residents in the public hospital system. On reflection, it was common back then to order more tests than were, perhaps, necessary. This was done not only because we were concerned for patient care but also because of lack of knowledge

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and without the wisdom that later years of experience finally brings. This approach was also adopted to ensure that we were not found wanting by our more senior colleagues. Was everything covered or did the registrar find something that needed to be ordered that had been overlooked or not known about? The registrar also had the same approach in their relationship with the consultant! While the unnecessary costs generated by our requests did not reach our consciousness at that time, this behavior is an example of positive defensive medicine or assurance behavior as will be discussed later.

The purpose of this chapter is to examine the subject of defensive medicine and its relationship with clinical risk management. It is not exhaustive and is only intended to be a broad overview of the subject approached from the viewpoint of a senior consultant physician with three decades of experience in clinical practice including significant experience in matters related to medical negligence and indemnity.

Definitions

Defensive medicine has been defined as “a clinical decision or action motivated in whole or in part by the desire to protect oneself from a malpractice suit or to serve as a reliable defense if such a suit occurs” [1]. Studdert notes that it “is a deviation from sound medical practice that is induced primarily by a threat of liability” [2]. The anxiety prompting the emergence of defensive medicine is well founded for the data is clear that the number of claims for medical negligence or complaints to Medical Boards or Health Services Commissioners progressively and gradually increased throughout the 1990s, reaching a peak about a decade ago [3] at the time of the so-called “medical indemnity crisis.” The problem is now that doctors are serving a community which has become more demanding and in which perfection seems to be expected. Furthermore, the profession is also being encouraged to be proactive in its efforts to screen for conditions such as chronic obstructive pulmonary disease, diabetes, and hypertension, to name just a few. Someone once said “change does not happen in a vacuum”; it will, itself, prompt a further change – the domino effect. What do doctors do in a litigious and more demanding environment? Well, they may do many things. High in the order of priorities is the desire to protect themselves against a complaint or negligence claim or against the fear of “missing” an unlikely or rare diagnosis. Ordering more tests is a logical consequence. It fills what is increasingly a patient expectation, and by relying less on our own expertise and clinical skills and more on a test, when previously we may not have, we may reduce the chance of an unwanted outcome and the risk of a malpractice claim. A review of the medical liability system in Australia, the UK, and the USA supports this contention. It was found that even small increases in medical litigation settlements led to significant changes in the medical care doctors were providing [4].

If the definition of defensive medicine is considered carefully, it becomes clear that it may take many forms. Most tend to think of defensive medicine as just

ordering more tests, but there are other ways that the profession practices defensively. In general terms, doctors adopt “assurance” or “avoidance” behaviors or both in this regard. Some of these, at least in some circumstances, can reasonably be considered to fall under the heading of good clinical practice. “Assurance” behavior or “positive” defensive medicine involves ordering tests or other medical services, for example, blood tests X-rays and CT scans, biopsies, and microbiology, that will have little or no effect on the management of the medical condition being treated. This may make the patient feel that they are being well cared for and comfort the doctor into feeling that unlikely or rare diagnoses and outcomes have been addressed and, in the event of a claim or complaint, that the complainant will eventually believe that the necessary standard of care had been reached. “Avoidance” behavior (“negative” defensive medicine), on the other hand, involves the efforts made by doctors to distance themselves from or to totally avoid clinical or other situations associated with significant legal risk, for example, ceasing the practice of obstetrics.

Clinical guidelines, care pathways, Cochrane reviews or advice from position papers, and evidence-based medical guidelines support the concept of good clinical practice, and their application gives some comfort, for in this situation you are less likely to be sued [5]. At the other end of the defensive medicine spectrum is the avoidance of high-risk procedures, conditions, and patients. For many doctors, these situations are beyond our expertise, and the avoidance by referral to more expert colleagues is to be applauded for, not only is this the correct response but it will undoubtedly lead to a better clinical outcome thereby reducing the risk of a claim and overall healthcare costs. For others, avoidance is purely a matter of minimizing the potential risk of a complaint to a regulator or a medical negligence claim. Thus, some aspects of defensive medicine are to be applauded, but others create significant issues for the profession and community alike, and it is a pity that, unlike increases in radiology and pathology requests [6], they are less commonly discussed.

Evidence for Defensive Medicine

The assertion that doctors are practicing more and more defensively needs to be supported by fact. The literature confirms the claims. For example, a study of general practitioners in New South Wales in 2000 found that 89 % of the respondents believed that “because of the current medicolegal climate, GPs are more likely to recommend tests or treatments that may not have worthwhile medical benefits” [7]. These concerns were supported by a 1999 study of British general practitioners [8]. In the latter study, about 70 % confirmed they were more likely to order more diagnostic tests or refer patients for follow-up, and about 50 % avoided the treatment of risky conditions. A more recent study from the USA [2] has shown that defensive medicine is regularly practiced by 93 % of doctors in the high-risk specialties. In this study of 824 neurosurgeons, orthopedic and general surgeons, obstetricians and gynecologists, and emergency department physicians, Studdert

showed that 92 % admitted to ordering more tests and arranging more diagnostic procedures and referrals than was necessary (assurance behavior). Forty-three percent ordered more X-rays than were needed, and 42 % had begun to restrict their practice to avoid, for example, patients with complex medical problems, those considered to be litigious and to avoid procedures with high complication rates (avoidance behavior). There was also a significant correlation between the practice of defensive medicine and the respondents' lack of confidence in their medical defense organization and their medical indemnity premium costs!

Subsequent studies confirm that defensive medicine continues to flourish and have confirmed Studdert's findings in the Australian context [9, 10]. A survey published by the *Medical Observer* in 2006 [9] found that 96 % of doctors stated that the way they practiced medicine was influenced by their fears of litigation. In this study, 48 % of GPs were reported to quote medicolegal concerns as a reason for ordering more pathology tests. More complex patients (44 %) and a variety of other reasons, including patient expectations (8 %), were other explanations given. The BEACH Project (Bettering the Evaluation and Care of Health) [10] has also shown that general practitioners were ordering 25 % more tests in 2004/2005 when compared with 2000/2001. These findings were confirmed by Salem and Forster [11] in their study of family doctors practicing in eastern and southeast Sydney. They found that 59 % avoided certain procedures, 29 % had stopped caring for high-risk patients, 83 % referred to specialists unnecessarily, 70 % prescribed more medicines than were indicated, and 83 % ordered more tests. Sixty-nine percent often sought advice from a colleague, and 49 % stated they might suggest unnecessary procedures.

It is clear that the practice of medicine is being significantly influenced by the fear of medical malpractice litigation. This leads to a consideration of the consequences to the community as a whole. The costs range from a reduction in the availability of services, particularly in remote and rural areas, an increase in morbidity and mortality, and an increase in the financial costs to the healthcare system. These result from a supplement to care (e.g., additional tests and unnecessary treatments), replacement of care (referral to another doctor or healthcare facility), and a reduction in care (refusal to treat some patients or conditions). The financial costs of defensive medicine to the community are difficult to determine. Mello et al. [12] have recently estimated that the cost of the medical liability system, including the costs of defensive medicine, while large (\$US55.6 billion) in the USA represents only 2.4 % of the total healthcare budget. Others have reported that a reduction in medical indemnity costs, used as a measure of perceived threat of litigation, translates into very little change to the national healthcare costs [13, 14]. These findings suggest that defensive medicine is ingrained in the medical psyche and that tort law reforms, introduced to limit medical negligence costs, have only had a limited effect to date.

Clinical Risk Management

What is the solution to the defensive medicine problem? In answering this question, it needs to be clearly understood that the topic of defensive medicine is inextricably

interwoven with the subject of clinical risk management. Many defensive medicine behaviors would be unnecessary if active risk management strategies were followed. Risk management has always been important, but it has been a largely neglected subject. It is fair to say that the Australian medical profession has not completely ignored risk management over the years. In the early to mid-1990s, some far-sighted individuals, groups, and hospitals committed themselves to a more systematic approach to this subject, for example, the Australian Quality and Safety in Health Care Committee. The “medical indemnity crisis” acted as the catalyst to prompt enormous activity and the application of a more systematic and aggressive approach to the management of risk across the broader profession.

Risk management has been defined as the “culture, processes and structures that are directed toward the effective management of potential opportunities and their adverse effects” [15]. It involves the identification of risk, its evaluation and ranking, the introduction of strategies to treat or manage the risk, and evaluation of these strategies. In the clinical context, it is the development of a strategic approach to improving patient safety by identifying the frequency and nature of medical errors and developing ways to reduce the likelihood of these errors occurring in the future [16]. The limitations in the length of this chapter prevent a detailed discussion of the subject, but put simply, risk management has two aims – to ensure better outcomes for more patients and to attempt to reduce the number and cost of negligence claims. Managing risk is about minimization of adverse events and unwanted outcomes and not about elimination, for the latter is only possible if all activity ceases. Generally speaking, risk management is largely about communication [17]. All aspects of communication are involved – verbal (instructions; advice; informed consent – including informed financial consent, explanation, and education, just to name a few); and non-verbal (a smile, a welcome greeting, and appropriate touching), written (clinical notes, prescriptions, reports, and referrals), handover and follow-up (end of shift, locums, and to nurses and other healthcare professionals), e-health, privacy, etc. Most strategies are simple, are easy to follow, and are not time consuming. Guidelines, protocols, care pathways, and explanatory materials – among many others – are useful risk management tools as the evidence shows that a claim is less likely to be successful if these have been followed. Keeping up to date, showing leadership to colleagues and staff, and being vigilant and active about recognizing and acting on adverse events and “near misses,” so that they may be avoided in the future, are also important.

Dr Paul Nisselle’s Ten Commandments of Risk Management provide a useful overall summary of clinical risk management [18]. These are as follows:

1. Keep good records
2. Document all discussions with your patient
3. Do not alter records
4. Follow up referrals and test results
5. Check the history before writing a prescription
6. Do not diagnose and treat over the telephone
7. Show patients your care

8. Give patients “enough” time
9. Manage adverse events proactively
10. Talk to your medical defense organization

These recommendations are excellent pieces of advice. The medical professional following them will likely provide a better and more appreciated standard of service and experience a much lower claims and complaint risk. Much of what happens in medical litigation is about the perception and experience of what happened during an episode of illness. Most doctors have all had cases where everything seemed to go “wrong,” but the patient was “happy” and can also remember the complaining patient whose operation had gone “perfectly.” What is the difference? It is usually – although not always – related to communication. On the one hand, there was open explanation, attentiveness, and concern and on the other perhaps little or none of this. So, when talking to patients, be open, frank, and empathetic. Remember, it is okay to say “I am sorry that this has happened to you” in a caring, empathetic, and concerned way. Explain what has happened in simple layman’s English. Be a translator and do not use jargon – communicate the medicine into language that your patient and family can understand, and while you are about all this, keep good contemporaneous notes that can be read and understood by others.

Toolkits, protocols, and guidelines published by the medical defense organizations (MDOs), the learned colleges and societies, individual craft groups, hospitals, and the Australian Medical Association are important contributions to keeping the busy clinician on track. Many are being developed by the MDOs in collaboration with the profession at large. These toolkits are deliberately slanted toward risk management and are aimed at reducing the number and cost of claims. Germane to this subject are the words of Dr Frederic Platt FACP, a Denver physician. Commenting on the medical indemnity insurer COPIC’s risk management guidelines, he stated “The guidelines are sensible, but they do remind me to act sooner rather than later and to err on the side of looking more, instead of less” [19].

Current clinical and practice risks are in general well recognized by most doctors. However, early recognition is the key to avoiding future problems. In this regard new technologies, novel pharmaceuticals, e-medicine and changes in legislation, and community attitudes need to be considered. Medical defense organizations are now informing members, through their newsletters and websites, of key issues as they arise. It is also important to recognize barriers hampering your ability to identify emerging risks. The barriers include group thinking, blind spots, tunnel vision, weak signals, and the fact that most of us are in information overload on a day-to-day basis as we practice medicine. Therefore, vigilance and maintaining an open mind is the key.

Conclusions

Defensive medicine is the price that the community will continue to pay until it recognizes that medical practice has its limitations, even in the best hands, and takes a less litigious approach. Until such community attitudinal changes take place, defensive medicine will continue to be practiced although it is reasonable to expect that as medical practitioners adopt a broader approach to clinical risk management the need to practice defensively will be reduced.

Ready Reckoner

- Defensive Medicine
 - Definitions – there are several definitions including “a clinical decision or action motivated in whole or in part by the desire to protect oneself from a malpractice suit or to serve as a reliable defense if such a suit occurs” and “a deviation from sound medical practice that is induced primarily by a threat of liability.”
 - Types of defensive medicine – assurance and avoidance behaviors – “assurance” behavior or “positive” defensive medicine involves ordering tests or other medical services that will have little or no effect on the medical management. “Avoidance” behavior (“negative” defensive medicine) involves the efforts made by doctors to distance themselves from or to totally avoid clinical situations associated with significant legal risk.
 - Evidence for the existence of defensive medicine confirmed by many studies – it has been practiced for many years but has only come to the public interest over the past 10–20 years. There is now good data to support the fact that it is being widely practiced.
 - Financial effects of defensive medicine – the cost of defensive medicine is thought to be large. There are few figures available, but in the USA the cost is thought to be in the order of \$55.6 billion annually.
- Clinical Risk Management
 - Definition – It has been defined as the “culture, processes and structures that are directed toward the effective management of potential opportunities and their adverse effects.”
 - Scope – It encompasses identification of risk in clinical practice, evaluating the likelihood of the event occurring, and the seriousness of it.
 - Risk management – It involves the putting place of strategies to prevent or minimize the chance of the event occurring.
 - Important risks – Poor communication is the largest underlying cause of medical negligence claims and complaints. It needs to be addressed and is an important factor in everyday clinical practice. It involves informed and financial consent, open disclosure, handover, education and explanation, talking to relatives, etc. It also involves caring and empathetic apologies and explanations.
 - Early recognition – New and potentially emerging risks need to be identified early, and strategies are put in place to address them.

Cross-References

- ▶ [Legal Medicine in Adult Medical Practice in Australia](#)
- ▶ [Medical Dispute in Indonesia Health](#)
- ▶ [Medical Indemnity Insurance in Australia](#)
- ▶ [Medical Law in Common Law Jurisdictions \(New Zealand\) \(No-fault\)](#)

- ▶ [Medical Liability: Comparing “Civil Law” and “Common Law”](#)
- ▶ [Medical Malpractice Liability](#)

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Further Reading

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