Supplementary Table 1. Definitions of defensive medicine

Listed after articulated definition of defensive medicine. Data are excerpts from the studies. The references gained with the chain search are presented. See Appendix 2, Supplementary File, for detailed chain search and all references of the studies' definition of defensive medicine.

Author, year, country	Aim/objective	Stated definition of defensive medicine	Excerpts contributing with other self-protective motives different from fear of malpractice liability influencing defensive medicine
Definition no. 1: *A narrow definition of DM as health professionals' deviation from sound medical practice motivated by a wish to reduce exposure to malpractice liability*			
Antoci et al. 2016, Italy	"We explain the complex (and somewhat paradoxical) interactions between defensive medicine, malpractice litigation and clinical risk by means of evolutionary game theory." - How physicians practice defensive medicine	" Defensive medicine is the practice performed by health care providers to safeguard themselves from patients' claims, while disregarding improvements in patients' health." "It can take the form of avoidance behavior and is called negative defensive medicine when the physician refuses to perform high risk procedures. It can also take the form of assurance behavior and is called positive defensive medicine when it is performed using extra tests or procedures." Reference: Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2), Kessler et al.(3)	No additional motives.
Aranaz Andrés et al. 2020, Spain	"Objective: To know the frequency and causes of low value surgical practices, according to the opinion of surgeons and anesthetists, and to determine their degree of knowledge about the Spanish "Choosing wisely" initiative." - Low-value medical practice	"The greatest responsibility for overuse was attributed to physicians, defensive medicine and mass media." "In addition, defensive medicine is given a greater weight as a determinant factor of overuse, almost 10 percentage points of what was considered in a similar study by primary care physicians, which is probably due to the greater frequency of judicial claims against surgical professionals. Reference: Mira et al.(4), McQuade(5), Office of Technology Assessment (OTA)(6)	No additional motives.
Bourne et al. 2015, UK	"The primary aim was to investigate the impact of complaints on doctors' psychological welfare and health. The secondary aim was to assess	"It is important to note that they also described clinicians involved in complaints practising medicine more defensively. Such practise may be broadly	No additional motives.

	whether doctors report exposure to a complaints process is associated with defensive medical practise." - How physicians practice defensive medicine - The prevalence of defensive medicine - Impact of complaints and litigations - Doctors' well-being	categorised into 'hedging' and 'avoidance'. Hedging is when doctors are overcautious, leading, for example, to overprescribing, referring too many patients or over investigation. Avoidance includes not taking on complicated patients and avoiding certain procedures or more difficult cases." Reference: Jain et al.(7)	
Bourne et al. 2016, UK	"To examine doctors' experiences of complaints, including which aspects are most stressful. We also investigated how doctors felt complaints processes could be improved." - Impact of complaints and litigations - How complaint processes can be improved	"The result is that complaints are associated with clinicians practising medicine more defensively; This pattern of behaviour includes hedging (over prescribing, over referral, over investigation) and avoidance (changing specialty or profession, avoiding high risk patients or procedures, abandoning procedures early). Reference: Davis(8), Verhoef et al.(9), Jain et al. (7), Shanafelt et al.(10), Cooper et al.(11), Hershey(12)	No additional motives.
Bourne et al. 2017, UK	"How adverse outcomes and complaints are managed may significantly impact on physician well-being and practice. We aimed to investigate how depression, anxiety and defensive medical practice are associated with doctors actual and perceived support, behaviour of colleagues and process issues regarding how complaints investigations are carried out." - Impact of complaints and litigations - Doctors' well-being	"*practised medicine more defensively following complaints against themselves or colleagues. This involved 'hedging', which includes performing more tests than necessary, over-referral and overprescribing as well as 'avoidance', which includes avoiding procedures, not accepting high-risk patients or abandoning procedures early." Reference: no reference.	No additional motives.
Bourne et al. 2019, UK	"To determine the prevalence of burnout in doctors practising obstetrics and gynaecology, and assess the association with defensive medical practice and self-reported well-being." "The aims were firstly to ascertain the prevalence of burnout in the cohort, secondly to determine the levels of DMP (defensive medical practice) and doctor well-being and explore their relationship with burnout. Finally, we aimed to explore the relationships between age, gender, ethnicity, doctor seniority, and both	"Defensive medical practice (DMP) is defined as a doctor's deviation from standard practice in response to complaints or criticism which can potentially harm patients as a result of either overinvestigation and treatment or because clinicians avoid involvement in difficult cases." Reference: Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Office of Technology Assessment (OTA)(6), Summerton(19)	No additional motives.

	burnout and DMP." - How physicians practice defensive medicine - The prevalence of defensive medicine - Doctors' well-being		
Domingues et al. 2014, Portugal	"The authors aimed to assess the Portuguese circumstances concerning situations of medico-legal dispute in Obstetrics, evaluate the conclusions of technical-scientific opinions and analyze their consequences." - Medicolegal system	"…facing the threat of professional liability cases, many doctors change their clinical attitude to a defensive medicine practice, whose exercise may not always be beneficial to the patient, by prescribing unnecessary exams or even by giving up or avoiding areas of activity more susceptible to litigation." Reference: Hammond(20), Laros(21), Mavroforou et al.(22), Hammond et al.(23), Pearlman et al.(24), Bettes et al.(25), American College of Obstetricians and Gynecologists(26), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Danforth(29), Sachs(30), Shiono et al.(31), Office of Technology Assessment(32), Sloan et al.(33), Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2), Howard(34), Owolabi et al.(35), Kravitz et al.(36), Chan et al.(37), MacLennan et al.(38), Queenan(39), Frigoletto et al.(40), Queenan(41)	No additional motives.
Feess 2012, Germany	"Hence, the problem of negative medicine is likely to be an important one, and the purpose of our paper is analyzing the impact of the trade-off between technology choice and care levels chosen on the second best optimal liability rule." - Medicolegal system - Impact of complaints and litigations	"…trying to reduce liability risks, doctors adopt treatments and carry out tests adding little or nothing to the patient's health, measures usually referred to as positive defensive medicine." "…avoiding the liability exposure by adopting the safe technology. We refer to this distortion toward the safe technology as negative defensive medicine." Reference: U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Kessler et al.(3), Kessler et al.(42), Danforth(29), Sachs(30), Shiono et al.(31), Office of Technology Assessment(32)	No additional motives.
Ferorelli et al. 2020, Italy	"The aim of this study is to quantify the rate and investigate the causes of head CT scan over prescription in an Emergency Department,	"*defensive medicine, in which the practice is motivated by legal rather than medical reasons."	No additional motives.

	trying to reduce inappropriate prescriptions. The ultimate purpose is to guarantee efficiency, effectiveness, patient safety matching demand of services, and real need of health care. This point of view is part of the modern health governance aimed at rationalization of health cost and appropriate allocation of resources, without forgetting the guarantees of any healthcare service. This study is aimed to improve prescriptive appropriateness as to reduce waiting times, to optimize choices and resources in patient interest, to calculate waste, and to reduce defensive medicine promoting a no-blame culture." - Medical overuse	"Defensive Medicine occurs when doctors order tests, procedures, and visits or avoid high-risk patients and procedures, primarily to reduce their exposure to malpractice liability." Reference: Office of Technology Assessment (OTA)(6), Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2), Hershey(12)	
Gadjradj et al. 2020, Europe and other	"The extent to which the practice of defensive medicine is linked to experience with malpractice lawsuits remains unclear. The aims of this study were to clarify this by surveying neurosurgeons about the frequency of experiencing medical lawsuits and to show how neurosurgeons reflect on facing such lawsuits." - How physicians practice defensive medicine - The prevalence of defensive medicine - Impact of complaints and litigations - Medicolegal system	"Due to fear of legal repercussions, physicians may be more inclined to practice defensive medicine, basing their decisions on legal rather than medical standards. This form of practicing medicine may stimulate physicians to perform unnecessary, additional therapeutic or diagnostic interventions that do not improve the medical condition of the patient (also referred to as positive defensive medicine), or it may cause physicians to refer or refuse difficult cases (also referred to as negative defensive medicine)." Reference: Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Kessler et al.(43), Office of Technology Assessment (OTA)(6), Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2)	No additional motives.
Garcia-Retamero et al. 2014, Spain	"To investigate whether and why doctors practice defensive medicine with their patients." - How physicians practice defensive medicine - The motives/reasons for practicing defensive medicine	"Given the high number of malpractice litigations, it is not surprising that more and more doctors practice some form of defensive medicine. (…) Defensive medicine is practised around the world: Evidence for both positive (e.g. increased diagnostic testing and increased follow-ups) and negative (e.g. avoiding treating certain conditions and patients) defensive practices has been found in…*." Reference: Chen(44), Nakajima et al.(45), Summerton(19), Hershey(12), Office of Technology	No additional motives.

		Assessment (OTA)(6), Brilla et al.(46), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15)	
Laarman et al. 2019, The Netherlands	"The objective of this study is to describe the experience of medical doctors with and the perceived impact of a disciplinary procedure and a disciplinary measure." - Impact of complaints and litigations	"A second concern is the phenomenon of 'defensive medicine', referring to the practice of performing additional and unnecessary diagnostic tests or the avoidance of high-risk medical treatments for patients in an effort to avoid complaints or claims." Reference: Panella et al.(47), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), McQuade(5), Office of Technology Assessment (OTA)(6), Kessler et al.(43), Van Boven et al.(16), Hershey(17), Dingwall(18), Summerton(19), Panella et al.(48)	No additional motives.
Litchfield et al. 2014, UK	"Aim: To gain an understanding of the family practitioner's (FP) medical and non-medical motives for ordering an LFT (liver function tests) and the influence of various social and technical factors on this decision." - How physicians practice defensive medicine	"The 'external' influences on test ordering included litigative pressure for defensive practice, (…)." Reference: no reference.	No additional motives.
Mira et al. 2018, Spain	" Objectives: Identify the sources of overuse from the point of view of the Spanish primary care professionals, and analyse the frequency of overuse due to pressure from patients in addition to the responses when professionals face these demands." - Medical overuse	"As a defensive measure against possible future claims." Reference: no reference.	No additional motives.
Ortashi et al. 2013, UK	"The objectives of this study were to assess the prevalence of the practice of defensive medicine in the UK among hospital doctors and the factors affecting it." - The prevalence of defensive medicine - The motives/reasons for practicing defensive medicine	"Defensive medicine is defined as a doctor's deviation from their usual behavior or that considered good practice, to reduce or prevent complaints or criticism by patients or their families. The United States Congress expand this definition to include the action of ordering tests, procedures and visits, or avoidance of high risk patients or procedures with the primary (but not sole) aim, of reducing malpractice liability. A more narrow approach was adopted in Summerton's 2000 study on defensive medical practices in General Practice; 'the ordering of	No additional motives.

		treatments, tests, and procedures for the purpose of protecting the doctor from criticism rather than diagnosing or treating the patient'. Defensive medical practices can be either positive or negative. When extra tests and procedures are performed primarily to reduce malpractice liability, this is a positive defensive medicine. Negative defensive medicine consists of avoidance of certain patients and procedures, thereby withdrawing medical services, and can deny patients productive care." Reference: Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Office of Technology Assessment (OTA)(6), Summerton(19)	
Pausch et al. 2020, Germany	"Medical overuse is a common problem in health care. Preventing unnecessary medicine is one of the main tasks of General Practice, so called quaternary prevention. We aimed to capture the current opinion of German General Practitioners (GPs) to medical overuse." - Medical overuse	"Causes of medical overuse were also attributed to external factors such as patient expectations and fear of litigation resulting in defensive medicine." Reference: Bishop et al.(49)	No additional motives.
Renkema et al. 2014, Italy	"The objective of this study was to identify conditions that influence the relationship between malpractice litigation risk and physicians' behaviors." - The motives/reasons for practicing defensive medicine - Impact of complaints and litigations	"Defensive medicine includes performing unnecessary medical procedures and tests, deviating from guideline practices and avoiding high-risk patients." Reference: Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), DeKay et al.(50), Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2), Lysdahl et al.(51)	No additional motives.
Steurer et al. 2009, Switzerland	"Using PSA screening as an example, we surveyed Swiss general physicians about their beliefs related to the benefits of screening and assessed to what extent liability fears influenced their recommendations for testing." - Impact of complaints and litigations	"Defensive medicine, 'a deviation from sound medical practice that is indicated primarily by a threat of liability'." Reference: Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15)	No additional motives.

Summerton 1995, UK	"To investigate defensive medical practices among general practitioners; (b) to compare any such practices with general practitioners' understanding of certain aspects of the terms of service and medical negligence and practitioners' concerns about the risk of being sued or having a complaint lodged." - How physicians practice defensive medicine - Impact of complaints and litigations	"Defensive medicine may be defined as the "ordering of treatments, tests and procedures for the purpose of protecting the doctor from criticism rather than diagnosing or treating the patient." Other workers have extended this definition to include the avoidance and the reduction of risk taking. The concept may also be subdivided into positive and negative aspects. Negative defensive practice occurs when the general practitioner performs in a way that goes against Dingwall's concept of socialy and clinicaly ideal levels. This may be taken to include such things as prescription of unnecessary drugs; increases in follow up, referral rate, and diagnostic testing, as well as avoidance of certain treatments and the removal of patients from the practitioner's list. In contrast, positive defensive medical practices are defined as quality improvements such as increased screening, development of audit or consumer satisfaction activities, and more detailed patient explanations or detailed note taking." Reference: McQuade(5), Hershey(17), Dingwall(18)	No additional motives.
Vargas-Blasco et al. 2020, Spain	"The objective of this study is to assess, in a similar way to the U.S. survey, the impact of MPL (Medical Professional Liability) claims on Spanish urologists, evaluating their frequency and detecting areas of special risk, as well as analyzing their repercussions on patients professionals." - Impact of complaints and litigations	"Beyond professionals' well-being, results of this survey confirm that facing a medial malpractice claim significantly affects doctor-patient relationships and increases defensive medicine behaviors, which had been repeatedly mentioned before." Reference: Sanbar et al.(52)	No additional motives.
Vimercati et al. 2000, Italy	"To evaluate the perception of "Defensive Medicine" by hospital-based obstetricians and the influence of this attitude on the choice of caesarean delivery." The motives/reasons for practicing defensive medicine	"Defensive medicine is a term that describes the particular attitude of people involved in health care who increase the use of tests and procedures in order to avoid or to protect themselves against malpractice suits." Reference: no reference.	No additional motives.
Vizcaíno-Rakosnik et al. 2020, Spain	"Our aim was to examine how malpractice claims brought against physicians impact (a) psychologically their well-being and (b) work performance."	"It has been suggested that claims may lead to defensive medical practices, such as ordering extra test."	No additional motives.

	- Impact of complaints and litigations	Reference: Charles(53)	
Young et al. 2020, UK	"The present study aims to explore clinician attitudes towards our different nudge-type educational messages targeting overuse, why they did or did not influence decisions to order tests, how this depends on the patient and context, and factors that may impede or facilitate wider implementation and scaling up of the intervention." - Medical overuse	"Defensive medicine refers to the fear of litigation influencing medical decision-making, including the overuse of tests and treatments." Reference: no reference.	No additional motives.
Definition no. 2: *A broad definition of DM as health professionals' deviation from sound medical practice motivated by a wish to reduce exposure to malpractice liability or other self-protective motives*			
Assing Hvidt et al. 2017, Denmark	"Thus, the aim of this study was to identify individual and shared perspectives among GPs on how defensive medicine is understood and experienced in their daily clinical work." - The motives/reasons for practicing defensive medicine - How defensive medicine is understood	"Defensive medicine (DM) is commonly defined as a deviation from standard medical practice due to fear of malpractice liability claims. The deviating medical practice may include two types of behaviour: an 'assurance behaviour' involving the ordering of more tests and procedures than medically indicated and an 'avoidance behaviour' in which the physician avoids high-risk procedures and/or patients to distance him/herself from malpractice liability." Reference: McQuade(5), Office of Technology Assessment (OTA)(6), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Kessler et al.(43), Van Boven et al.(16), Hershey(17), Dingwall(18), Summerton(19), Panella et al.(48)	"We found that GPs in a Danish general practice setting understand DM as unnecessary and meaningless medical actions. Drawing on their daily experiences the GPs furthermore reasoned that these defensive actions are carried out as a result of succumbing to daily pressures deriving from four different sources: the system, patients, the GPs themselves and colleagues." "Our research thus documents that Danish GPs understand DM in a broader and more differentiated way than how the phenomenon has predominantly been defined within the health economical and judicial literature. We assert that if other GPs, physicians and health professionals from similar cultural and organisational contexts understand and experience DM this way then the research findings of this study complement the traditional definition of DM." - Fear of patient dissatisfaction - Fear of overlooking a severe diagnosis - Fear of negative publicity
Assing Hvidt et al. 2019, Denmark	"The aim of this article is to show how Jürgen Habermas' communicative action theory serves as a useful tool in analysing and interpreting empirical data on how Danish general practitioners experience defensive medicine in their everyday working life."	"Traditionally, DM is understood as physicians' deviation from sound medical practice due to fears of liability claims or lawsuits. These deviating behaviours may either take the form of avoidance behaviour (avoiding high-risk patients or procedures) or assurance behaviour (involving physicians	"*DM can be seen as a symptom of a crisis of trust in the relationship between medicine and society leading to opportunistic (and strategic) rather than altruistic (and communicative) attitudes in health care – hereby threatening the very moral and ethical impulses inherent in medicine."

	- How physicians practice defensive medicine - The adverse effects of defensive medicine	ordering extra diagnostic tests, procedures or visits). Both behaviours aim to reduce the exposure to malpractice liability. Some shortcomings can be argued to pertain to this understanding of DM. First, an understanding of DM as motivated primarily by a perceived or actual threat of legal action does not explain why DM occurs and is experienced as so troubling to clinicians in countries with 'no fault' tort systems in which physicians are not held financially liable for the medical harm that they have caused and patients are compensated by the government. Second, and perhaps most importantly, understanding DM as based on litigation fears does not take the whole implicit, contextual background of DM into consideration as experienced by individual physicians." Reference: Gaine(54), Office of Technology Assessment (OTA)(6), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Kessler et al.(43), Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Summerton(19), Panella et al.(48)	"Although legal complaints constituted a significant concern among the GPs of this study, affecting their behaviour towards defensive medical practice, the fear of falling prey to a vague and all-encompassing culture of external control and blame appeared to motivate their defensive practices even more." "Although the GPs were aware of the traditional understanding of DM as medical actions based on litigious concerns, they discussed its salience in their own clinical context, proposing a broader perspective on DM as involving all those unnecessary medical actions that are more substantiated by feelings of demands and pressures than meaningful clinical behaviour." - Fear of patient dissatisfaction - Fear of overlooking a severe diagnosis - Fear of negative publicity
Brilla et al. 2006, Germany and USA	"To study whether and how fear of litigation and defensive medicine are communicated during residency training and to assess whether this affects residents' attitudes." - Impact of complaints and litigations	"It has been claimed repeatedly that the fear of litigation prompts physicians to initiate additional tests, not on medical grounds, but with the intention to avoid possible litigation or to have a more defensible case if litigation occurs later on (also called "defensive medicine")." Reference: no reference.	"Among several possible explanations for this interesting finding, he hypothesises that "fear of malpractice may prompt to adopt (. . .) unwritten clinical standards (. . .) to prevent lawsuits. These (. . .) standards may be learned in medical school and residency programs or may diffuse informally from one clinician to another. (. . .) Once the need to practice defensively became ingrained in physicians' behaviors, implicitly and proactively adopting defensive practices might occur relatively routinely." - Unconscious defensive medicine
Calikoglu et al. 2020, Turkey	"This study aimed to evaluate the defensive medicine knowledge, attitudes, and behaviours of physicians working in the surgical departments of a Turkish university hospital." - How physicians practice defensive medicine - The motives/reasons for practicing defensive medicine	"The concept of defensive medicine, also known as defensive medical decision making, first appeared in 1978, and is broadly defined as medical behaviors that avoid physician liability without providing increased benefits to the patient. Specific defensive practices include ordering unnecessary tests or procedures, avoiding high-risk patients or services, or referring patients to specialty providers. Defensive medicine is included in the MeSH terms of PubMed	"The majority of physicians practice defensive medicine without purpose or unintentionally." - Unconscious defensive medicine

	- How defensive medicine is understood	as 'the alterations of modes of medical practice, induced by the threat of liability, for the principal purposes of forestalling lawsuits by patients as well as providing good legal defense if such lawsuits are instituted'." "Defensive medicine represents health professional behaviour intended to prevent malpractice from administrative, criminal, legal, and ethical sanctions. Physicians order tests and avoid treating high-risk patients (when they have a choice) to reduce their exposure to lawsuits, or are forced to discontinue practicing because of overly high insurance premiums. There are two primary forms of defensive medicine. When physicians perform extra tests or procedures primarily to reduce malpractice liability, they are practicing positive defensive medicine. When they avoid individual patients or processes, they are practicing negative defensive medicine." Reference: Office of Technology Assessment (OTA)(6), Hershey(12), NCBI(55), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15)	
Catino et al. 2009, Italy	"The object of the present study is to investigate the professional behaviour of doctors in Italy with a view to determining whether they practice defensive medicine and, if so, in what form and to what extent. … *it focuses on the following concerns of doctors: the fear of having to face litigation; the fear of receiving claims for compensation; and the fear of compromising their reputation and jeopardising their career." - How physicians practice defensive medicine - The prevalence of defensive medicine - Impact of complaints and litigations	"Defensive medicine takes place when doctors, motivated primarily by the objective of reducing their exposure to medical malpractice litigation, prescribe unnecessary tests, procedures or specialist visits, or, alternatively, avoid patients or procedures that involve a high level of risk. When doctors engage in the excessive use of tests and procedures, they practice *positive defensive medicine*. When they avoid certain patients or procedures, they practice *negative defensive medicine."* Reference: Office of Technology Assessment (OTA)(6)	"The fear of negative publicity. A substantial component of the general practitioners interviewed in the NS (43.5%) expressed concern about the accusatory approach adopted by the media. In the LS the surgeons revealed a particularly marked fear of negative publicity and the loss of image." - Fear of negative publicity
Elli et al. 2013, Italy	"The aim of this study was to clarify the impact of defensive medicine on gastroenterological practices in Lombardy." - How physicians practice defensive	"This "defensive medicine" (DM) represents a deviation from sound medical practice that is primarily induced by the threat of liability. DM consists of two main behaviours, one 'assuring' (sometimes called positive DM) and the other	"Thirty-four respondents (54%) reported practising DM in order to minimise the risk of legal action by patients, and 19 (30%) in order to decrease the risk of legal action by patients and hospital; the rest said they did so because they found DM-oriented practices reassuring. Forty-six respondents

	medicine - The prevalence of defensive medicine - The cost of defensive medicine	'avoiding' (sometimes called negative DM)." Reference: Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), McQuade(5), Hershey(17), Dingwall(18), Office of Technology Assessment (OTA)(6), Chawla et al.(56), Grepperud(57), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Sloan et al.(58)	(72%) reported that they had been asked for DM-oriented procedures by general practitioners; the remaining 28% had performed 'defensive' procedures because they had been requested by specialists or by both specialists and general practitioners." - Fear of patient dissatisfaction
Kucuk 2018, Turkey	"In the current study, opinions and attitudes of OB/GYNs regarding defensive medicine and to what extent they practice defensive medicine are investigated." - The prevalence of defensive medicine - The motives/reasons for practicing defensive medicine	"Defensive medicine, in a general sense, is a term that describes the actions taken by the health professionals to reduce the probability of being sued rather than helping the patient." "There is negative- and positive-defensive medicine depending on the circumstances. On one hand, positive-defensive medicine may emerge as unneeded hospitalisations, prescriptions or diagnostic tests and procedures which are unnecessary. On the other hand, negative defensive medicine includes abstaining from necessary procedures, treatments or hospitalisations that are assumed risky." Reference: Office of Technology Assessment (OTA)(6), Turley(59), Kessler et al.(3)	"Naturally, the conscious practice of defensive medicine could be investigated in our study. We do not know the dimensions of unconscious defensive medicine practice in this regard." - Unconscious defensive medicine
Lindenthal et al. 1999, The Netherlands and USA	"Objective: To compare attitudes of consumers in America and Holland toward the quality and cost of healthcare." - The quality and cost of healthcare	"Defensive medicine (increasing referrals and diagnostic tests for fear of missing something or making the wrong diagnosis)." Reference: no reference.	"Defensive medicine (increasing referrals and diagnostic tests for fear of missing something or making the wrong diagnosis)." - Fear of overlooking a severe diagnosis
Motta et al. 2015, Italy	"This study aims at verifying relationships between the perception of medico-legal risks involved in the professional activity of Italian otolaryngologists, defensive medical behaviour and their understanding of professional liability insurance in matters of civil liability." - How physicians practice defensive medicine - The motives/reasons for practicing defensive medicine	"Defensive medicine is defined as the ordering of tests and procedures (positive defensive medicine), or the avoidance of high-risk patients or procedures (negative defensive medicine), primarily to reduce exposure to malpractice liability." Reference: Office of Technology Assessment (OTA)(6)	"This behaviour (*defensive medicine) has become deeply ingrained in many physicians' practices resulting in a difficult to quantify "unconscious" defensive medicine." - Unconscious defensive medicine

	- Medicolegal system		
Müller et al. 2020, Germany	” The aim of this study was to explore the experience of regret following diagnostic decisions in primary care.” - The experience of regret following diagnostic decisions	“However, reducing the risk of possible regret, as is the case in defensive medicine, may result in additional risks to patients.” Reference: Sorum et al.(60)	“However, reducing the risk of possible regret, as is the case in defensive medicine, may result in additional risks to patients. When shared with colleagues, such experiences may have wider implications for local norms and standards among health care professionals. This issue was also raised in a study on the determinants of defensive medical practices. The study showed that access to an incident reporting system had had a significant impact on most of the defensive medicine measures. Physicians with access to the system, and thereby to their colleagues’ incident reports, practiced medicine that was more defensive.” - Fear of overlooking a severe diagnosis
Olcay et al. 2017, Turkey	“Cardiologists participate in the diagnosis and interventional treatment of numerous high-risk patients. The goal of this study was to investigate how the current malpractice system in Turkey influences cardiologists’ diagnostic and interventional behavior and to obtain their opinions about an alternative patient compensation system.” - How physicians practice defensive medicine - Medicolegal system	“Defensive medicine is defined as establishing diagnoses that would not alter patient care, and performing unnecessary testing and treatments.” “Defensive medicine is a deviation from sound medical practice that is induced mainly by a threat of malpractice suit.” “Positive defensive medicine is expressed in the increased use of resources, both to reduce the risk of receiving a complaint and to increase doctors’ ability to defend one; this could be called “augmented” or “extra” medical practice. Negative defensive medicine refers to a withdrawal of medical services; for example, neurosurgeons may avoid certain patients or surgical procedures if they believe these place them at greater risk for litigation.” Reference: Office of Technology Assessment (OTA)(6), Vandijck et al.(61), Office of Technology Assessment(62), Office of Technology Assessment(63), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Kessler et al.(3), Kessler et al.(42), Dewar(64), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Danforth(29), Sachs(30), Shiono et al.(31), Office of Technology Assessment(32)	“Self-reports of defensive medicine may be biased, and doctors may overstate the frequency of performing defensive medicine. By its very nature, the unconscious practice of defensive medicine will not be reported by doctors.” “The fear of litigation and loss of reputation are the major reasons for the practice of defensive medicine.” - Fear of negative publicity - Unconscious defensive medicine

Osorio et al. 2020, Spain	”The aims of this study were to explore healthcare professionals’ opinions about low-value practices, identify practices of these kind possibly present in the hospital and barriers and facilitators to reduce them.” - Low-value medical practice	“Regarding barriers to reduce low-value care, defensive medicine was identified as an important barrier perceived by professionals to reduce low-value practices, especially in the medical specialties. Other studies have identified this as a factor for low-value practices. The origin of this barrier have been associated with doctor-patient communication.” Reference: Perry Undem Research/ Communication(65), Zambrana-García et al.(66), Domino et al.(67)	“At the micro level, the most common barrier was related to the category of defensive medicine (Table 3): “. . .in my case, is better to have one test more than one test missing. Because, if you miss something that may have dramatic consequences, for instance an undetected recurrence. So, you ended up asking for that test. Even though you know. . . you are 95% sure you will not find anything bad.” “Table 3: Distribution of verbatim quotations about barriers to reduce low-value practices by type of specialty. Coding was done based on topics, categories and levels. Defensive medicine: Self-protection, Previous bad experiences, Management of uncertainty” (table 3, p. 465). “Regarding barriers to reduce low-value care, defensive medicine was identified as an important barrier perceived by professionals to reduce low-value practices, especially in the medical specialties. Other studies have identified this as a factor for low-value practices. The origin of this barrier have been associated with doctor-patient communication. Dialog between doctors and patients is probably becoming more complex due to increasing patients’ literacy and knowledge. Furthermore, expert patients’ demands for tests that doctors may consider of low-value suggest a paradox: while it is a low-value practices, it may contribute to building trust between professionals and patients.” - Fear of patient dissatisfaction - Fear of overlooking a severe diagnosis
Osti et al. 2015, Austria	“Even though European literature recognizes the incorporation of defensive practice in routine medical services, a gap of knowledge about the factual defensive dimensions is evident. The objective of the present investigation was therefore to assess prevalence and medico-legal context of defensive practice to establish a solid basis for appreciation and discussion of adverse effects of defensive medicine on mutual trust, self-conception and patient safety in the Austrian health care system.” - The prevalence of defensive medicine - The adverse effects of defensive medicine	“It (*defensive medicine) is defined as medical practices that may exonerate doctors from liability without significant benefit to patients.” Reference: Nahed et al.(68), Catino(69)	“The doctors’ perception of practice environment and requested standards of medical care appear to be a common denominator of all considerations regarding defensive medicine: it is affected by insecurity, defencelessness and stigmatization as well as by deficient legal and interpersonal core assumptions. Transparency, information, clarification of facts and integration of medical professionalism and experience are essential to raise a tangible and realistic awareness regarding the principles of law, doctor’s self-perception and patient’s rights and duties as well as to obtain an efficient cooperation for the future advancement of health care systems. Medical education represents a key role for the avoidance of non-evidence-based, pure defensive diagnostics”

	- Medicolegal system		- Fear of negative publicity
Panella et al. 2016, Italy	"A second victim is 'a healthcare provider involved in an unanticipated adverse patient event, medical error, and/or a patient-related injury, who becomes victimised in the sense that the provider is traumatised by the event'. The possible role of being second victim has never been assessed as possible determinants of DM. The objective of this study, therefore, was to identify the determinants of DM among Italian hospital doctors including being a second victim." - The motives/reasons for practicing defensive medicine - The adverse effects of defensive medicine	"Defensive medicine (DM) is a deviation from sound medical practice that is induced primarily, but not solely, by the threat of liability claims." Reference: Office of Technology Assessment (OTA)(6), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Kessler et al.(43), Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Summerton(19)	"We also recognise that other factors may determine DM, such as the enormous variation in the medical malpractice environment, and in the healthcare and welfare systems and legal institutions across countries." "The most prominent predictor for practising DM was the physicians' experience of being a second victim after an adverse event. … A second victim is likely to be a physician that experiences liability. On the other hand, a physician can be a second victim with or without having been sued. We believe that being a second victim is a better predictor of practising DM than the mere liability experience and exposure, because it better measures the personal anxiety and emotional toll of physicians that harmed their patients and suffered for their own actions." "Self-reports can also be biased by concerns about reporting DM practices, including a 'socially desirable response bias'. Together with unconsciously practised DM, this could lead to an underestimation of the prevalence of DM and, consequently, a possible contamination bias of the sample." - Fear of overlooking a severe diagnosis - Unconscious defensive medicine
Panella et al. 2017, Italy	"To identify the prevalence of the practice of defensive medicine among Italian hospital physicians, its costs and the reasons for practising defensive medicine and possible solutions to reduce the practice of defensive medicine." - The prevalence of defensive medicine - The cost of defensive medicine - The motives/reasons for practicing defensive medicine - Solutions to reduce defensive medicine	"Defensive medicine (DM) is a deviation from sound medical practice that is induced primarily, but not solely, by the threat of liability claims. DM consists of two behaviours, one that may supplement care (active DM) and the other that involves avoidance behaviour to distance doctors from sources of legal risks (passive DM)." Reference: Office of Technology Assessment (OTA)(6), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Kessler et al.(43), Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Summerton(19), Panella et al.(48)	"Regarding the reasons for practising DM, a major determinant reported was a general negative context surrounding negligence claims against physicians. *2.8% of physicians feared compromising their professional reputation and or career. Some respondents (13.8%) perceived that an ineffective physician–patient relationship was the most important cause of DM. Some physicians (5.3%) indicated unfavourable mass media and public attitudes towards medical practices as causes, and 7.1% of physicians indicated inadequate medical and or organizational procedures." "Fourteen per cent of physicians believed that DM had a positive effect on their patients, because it increased patient satisfaction, it put patients' needs at the centre of medical care and it reduced patients' risk." "Moreover, it is impossible to measure the portion of

			unconscious DM, because it originates from requests by other specialists or ignorance of best practice evidence." - Fear of patient dissatisfaction - Fear of negative publicity - Unconscious defensive medicine
Passmore et al. 2002, UK	"The aim of this report was to examine the extent of defensiveness among psychiatrists and to examine the relationship between defensiveness and seniority, as well as the effect of previous experiences on the level of defensiveness." - The prevalence of defensive medicine - The motives/reasons for practicing defensive medicine	"One definition of defensive practice is the "ordering of treatments, tests and procedures for the purpose of protecting the doctor from criticism rather than diagnosing or treating the patient. It has been proposed that there are both positive and negative aspects of defensive practice. Examples of positive aspects might include improvements in the quality of services with more detailed explanations being given to patients and increased patient satisfaction. Examples of negative aspects might include the prescription of unnecessary treatments, increased observation levels of inpatients, and increased rates of follow up." Reference: McQuade(5), Hershey(17), Dingwall(18)	"In the section on defensive practice, respondents were asked if they had taken any of four specified actions within the past month because of worries about possible consequences such as complaints, disciplinary action by managers, legal action, or publicity in the media." - Fear of negative publicity
Ramella et al. 2015, Italy	"To our knowledge no data is currently available regarding the perception of risk among radiation oncologist physicians. We therefore enquired with the members of the Italian Association of Radiation Oncology (AIRO) regarding the frequency and nature of their defensive practices. We also tested whether the likelihood of this practice was associ- ated with sociodemographic characteristics." "We present here the first survey of radiation oncologists' views regarding malpractice liability and defensive medicine practice." - How physicians practice defensive medicine - The prevalence of defensive medicine	"Defensive Medicine occurs when doctors order tests, procedures, or visits or avoid high risk patients or procedures, primarily (but not necessarily or solely) to reduce their exposure to malpractice liability. When physicians do extra tests or procedures primarily to reduce malpractice liability they are practicing positive defensive medicine (assurance behaviour). When they avoid certain patients or procedures, they are practicing negative defensive medicine (avoidance behaviour). The problem is, however, not new. In 1972, an interesting article by Hershey entitled "The defensive practice of medicine: myth or reality" underlined that defensive medicine is a deviation from medical practice that is induced primarily by a threat of liability." Reference: Office of Technology Assessment (OTA)(6), Hershey(12)	"Finally, more than 68 % of physicians stated that the climate of opinion that exists towards doctors was one of the major issues for practising defensive medicine, and there is an upward trend with regard to more experienced respondents." "Although the threat of disciplinary actions and/or negative publicity does not seem to represent a major concern for radiation oncologists, and personal legal suits are rare, a major underlying cause for this behaviour (*defensive medicine) is the current negative climate of opinion towards doctors." "Factors influencing defensive medicine behaviours: Fear of disciplinary sanctions by their medical institution or fear of negative publicity, loss of image in case of complications/adverse events…" "To address the problem, it is important to have a clear understanding of why this defensive behaviour is adopted and what are the underlying factors that influence it,

			including fear of malpractice suits and claims for damages, especially among young radiologists." - Fear of negative publicity
Rohacek et al. 2012, Switzerland	"To identify reasons for ordering computed tomography pulmonary angiography (CTPA), to identify the frequency of reasons for CTPA reflecting defensive behavior and evidence-based behavior, and to identify the impact of defensive medicine and of training about diagnosing pulmonary embolism (PE) on positive results of CTPA." - The prevalence of defensive medicine - The motives/reasons for practicing defensive medicine - The adverse effects of defensive medicine	"Defensive medicine is defined as the ordering of treatments, tests, and procedures with the primary aim of protecting the physician from liability rather than of substantially furthering the patient's diagnosis or treatment." Reference: McQuade(5), Office of Technology Assessment (OTA)(6), Hershey(17), Dingwall(18), Chawla et al.(56), Grepperud(57), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Hershey(12), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Sloan et al.(58)	"We hypothesized that defensive factors, such as fear of missing PE or demand from the patient or his/her relatives, could be a common reason for ordering an unnecessary CTPA, and that documentation of motivations for ordering a CTPA, coupled with appropriate training in medical decision making to diagnose PE, might influence the behavior of physicians and direct them towards evidence-based medicine." "Our findings indicate that factors reflecting defensive behaviour such as ''fear of missing PE'' were the reason for ordering CTPA in more than half of the orders (red.). Factors like ''request from the patient or his/her relatives'' or ''fear of being sued'' played a minor role. This corresponds to a small number of prosecutions of physicians in Switzerland and stands in contrast to the USA where the risk of facing a malpractice claim is high." - Fear of patient dissatisfaction - Fear of overlooking a severe diagnosis
Solaroglu et al. 2014, Turkey	"The aim of this study was to investigate the characteristics of defensive medicine, its reasons, and the extent to which it is practiced in the Turkish health care system." - How physicians practice defensive medicine - The prevalence of defensive medicine - The motives/reasons for practicing defensive medicine	"Defensive medicine is defined as medical practices that help doctors avoid liability without providing any additional benefit to the patient." "There are two types of defensive medicine. Positive defensive medicine is expressed by the increased use of resources, both to reduce the risk of receiving a further complaint and to increase doctors' ability to defend one; this could be called ''augmented'' or ''extra'' medical practice. When neurosurgeons perform extra tests or procedures primarily to reduce their malpractice liability, they are practicing positive defensive medicine. Negative defensive medicine refers to a withdrawal of medical services; for example, neurosurgeons may avoid certain patients or surgical procedures if they believe these place them at greater risk for litigation." Reference: Office of Technology Assessment	"It has been reported that fear of litigation and loss of reputation are the major causes of defensive medicine." "By its very nature, the unconscious practice of defensive medicine will not be reported by doctors." - Fear of negative publicity - Unconscious defensive medicine

		(OTA)(6), Hershey(12), Office of Technology Assessment(62), Office of Technology Assessment(63), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Kessler et al.(3), Kessler et al.(42), Dewar(64), Klingman et al.(13), Rosenblatt et al.(14), Grumbach et al.(15), Danforth(29), Sachs(30), Shiono et al.(31), Office of Technology Assessment(32)	
Summerton 2000, UK	"This paper reports the results from a survey conducted in 1999 in which certain features indicative of negative defensive practice were compared with an identical survey conducted five years previously… The overall objective of this present study was to re-examine negative defensive medical practice in general practice and to highlight any significant changes over the past five years." - How physicians practice defensive medicine	"Defensive medicine may be defined as the ordering of treatments, tests, and procedures for the purpose of protecting the doctor from criticism rather than diagnosing or treating the patient." Reference: no reference.	"Diagnostic difficulties within primary care appear to compound defensive practice. In a survey of Dutch GPs, diagnostic uncertainty was one of the key considerations in a shift towards defensive practice." - Fear of overlooking a severe diagnosis
Symon 2000, UK and Scotland, *Litigation and defensive clinical practice: quantifying the problem*	"To assess the evidence for claims about a rise in defensive clinical practice, particularly within maternity care; to describe an attempt to quantify the extent of defensive practice; and to identify areas for further research." - How physicians practice defensive medicine - The prevalence of defensive medicine	One of the most significant claims about litigation is that it has allegedly introduced defensiveness in clinical practice; specifically there has been the charge that `tests deemed to be inaccurate are used in clinical practice because some obstetricians fear litigation'. However, the term `defensiveness', though widely used, may be understood in more ways than one. Black (1990) characterised defensiveness in terms firstly of risk avoidance, then of risk reduction. A `risk avoidance' strategy may include practitioners `...avoiding specialties, procedures, and patients that they perceive carry a high risk of leading to a malpractice claim'. Reference: Black(70), Ennis et al.(71), Simmons(72)	"Change in practice is almost certainly multi-factorial, and it is hard to isolate the effect of the fear of litigation on clinical practice." "There is also the difficulty in deciding what constitutes defensive practice: Clements suspects `that one man's defensive medicine is another man's risk management'." "The subject of defensive clinical practice is one which is difficult to define, and one which appears to divide practitioners with regard to its merits/demerits and implications for practice. Certain claims about the extent of defensive practice have been made, but it is not clear if the US experience will be replicated in the UK to any significant degree."
Symon 2000, UK and Scotland, *Litigation and changes in professional*	"Concerns about an apparent rise in defensive clinical practice have centred on an alleged rise in intervention rates, particularly in maternity care. This, the second of two articles, explores the views of a number of clinical and other	"Claims have been made that, as a result of an apparently relentless increase in the incidence of litigation, practitioners have begun to react defensively. Among these claims are the assertion that investigations and interventions are being carried	"Asked about personal experience of defensive practice, the following was offered by a senior clinician: In the situation where we're withdrawing care from a baby who's been severely asphyxiated...clinically you know that baby is essentially dead, or brain dead, but you're going through the

behaviour: a qualitative appraisal	practitioners concerning defensive practices." - Impact of complaints and litigations	out regardless of clinical justification." Reference: no reference.	motions of knowing there's an EEG, or another EEG ± you may have two, three over the course of seven days, or 10 days... (Consultant Neonatologist). Such courses of action may be eminently defensible from the point of view of preparing parents for the inevitable, but it may be questioned whether barrages of expensive tests are always justifiable." "Overall the responses indicated that the question of defensive practice is very much open to individual interpretation. Not all were agreed that reactions which may be thought defensive are necessarily detrimental to the standard of care, and it seems improbable that the UK (or Scotland at least) is faced with the same problems apparently encountered in parts of the USA." - Fear of patient dissatisfaction
Tanriverdi et al. 2015, Turkey	"This study determines the attitudes and orientations of medical oncologists on defensive medicine. (red.) The survey was designed to determine the participants' demoraphic characteristics and defensive medicine practices." - How physicians practice defensive medicine - How defensive medicine is understood	"Defensive medicine is a deviation from medical practice that is induced primarily by a threat of liability." "'Defensive medicine occurs when doctors order tests, procedures, or visits or avoid high-risk patients or procedures, primarily - but not necessarily or solely - to reduce their exposure to malpractice liability.'' "Acquiescing to requests for excessive medical testing or procedures is called positive defensive medicine and is practiced by physicians to avoid malpractice lawsuits, and avoiding some patients or procedures is called negative defensive medicine." Reference: Baicker et al.(73), Kessler et al.(3), Kessler et al.(74), Hellinger et al.(75), Rubin et al.(76), Kessler et al.(77), U.S. Senate Subcommittee on Nutrition and Human Needs(27), Marieskind(28), Chandra et al.(78), Hershey(12), Office of Technology Assessment (OTA)(6)	Question in the survey: "The underlying cause of defensive medicine?" Possible answers: "Fear of litigation, poor working conditions (patient dense etc.), health policy, poor communication with patients, burnout syndrome, heroism and perfectionism, lack of financial motivation, administrative pressures, expectations of patients and their relatives." "We believe that physicians of state hospital, due to their poor working environments caused by intensive outpatient rates, that defensive medicine is adjusting to these conditions. In particular, we see that the definition of defensive medicine among fellows is unclear." - Fear of patient dissatisfaction - Fear of negative publicity
Tebano et al. 2018, 74 countries	"To investigate fear of legal claims and defensive behaviours among specialists in infectious diseases (ID) and clinical microbiology (CM) and to identify associated	"When physicians perceive litigation as a threat, they may adopt defensive behaviours as a way to reduce the chances of litigation or to ensure a form of defence in the case of malpractice claims. These	"It has been argued that the diffuse cultural perception of modern medicine as a perfect science can make people consider medical errors/omissions as a deviation from the correct practice in any situation. This can produce in the

	demographic and professional characteristics." - How physicians practice defensive medicine - The motives/reasons for practicing defensive medicine - Impact of complaints and litigations	behaviours usually deviate from evidence-based practice and are known as defensive medicine. This encompasses the tendency to over-prescribe diagnostic examinations and medications, to increase consultations with other physicians as well as referrals to hospitals, and to avoid at-risk patients and procedures, all in order to reduce the likelihood of omissions or errors." Reference: Kessler et al.(43), Office of Technology Assessment (OTA)(6), Van Boven et al.(16), McQuade(5), Hershey(17), Dingwall(18), Summerton(19)	public, as well as in doctors, an intolerance of error and a culture of blame, according to Hoffman and Kanzaria. Errors might then lead to shame and consequently some doctors prefer to act defensively, explaining why fear and defensive behaviours are not necessarily bound to a real legal threat." - Fear of overlooking a severe diagnosis
Van Boven et al. 1997, The Netherlands	"Ordering laboratory tests and diagnostic imaging can be a part of the defensive behavior of the physician. How often does this occur in family practice in the Netherlands?" - The prevalence of defensive medicine	"Defensive behavior is defined as a clear deviation from the family physician's usual behavior and from what is considered to be good practice in order to prevent complaints or criticism by the patient or the patient's family." Reference: no reference.	"Defensive testing varied with the clinical reasons to order a test: the wish to exclude a disease or to reassure the patient was a much stronger motive for defensive testing than the intention to confirm a diagnosis or to screen." - Fear of patient dissatisfaction
Vandersteegen et al. 2017, Belgium	"In 2010 the Belgian government introduced a low cost administrative procedure for compensating medical injuries to overcome the major shortcomings of the existing tort system. This paper examines, for the first time, to what extent this reform had an impact on physician specialists' defensive practices and what are the relevant determinants affecting physicians' clinical decision making." - Medicolegal systems	"Defensive medicine can be defined as the avoidance of certain high-risk procedures or patients (avoidance behaviour or negative defensive medicine), or the ordering of procedures, tests or visits (assurance behaviour or positive defensive medicine), primarily (but not solely) due to the threat of medical liability." Reference: Office of Technology Assessment (OTA)(6)	"In addition, unconscious defensive medicine is frequently practiced, though not reported by physicians." - Unconscious defensive medicine
Yan et al. 2017, The Netherlands	"The aim of this study is to explore perceived liability burdens and self-reported defensive behaviors among neurosurgeons in the Netherlands and compare their practices with their non-European counterparts." - How physicians practice defensive medicine - Impact of complaints and litigations	"Defensive medicine (DM) is a departure from standard medical practices out of a fear of litigation. There are two types of defensive medicine: positive DM is the practice of prescribing unnecessary, additional medical treatment out of a fear of lawsuits, and negative DM is avoiding high-risk procedures, which could compromise clinical decision-making." Reference: Office of Technology Assessment (OTA)(6), Report of the Secretary's Commission on Medical Malpractice(1), Duke Law(2)	"It is possible that, while initially motivated by financial pressure, DM has partly become ingrained in the institutional culture of some clinics. DM has thus become a cultural as well as a financial phenomenon." "Lastly, many factors may contribute to defensive behaviours among neurosurgeons, e.g., personal experience, confidence, and risk perception." "They (*Dutch neurosurgeons) rarely view their insurance

			premiums as burdensome or their patients as potential lawsuits." - Unconscious defensive medicine

*Text edited in order to increase the understanding of the text or reduce the text

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