

## Research Article

# Barriers to Medical Error Disclosure: An Organizing Framework and Themes for Future Research

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## Abstract

Based on an extensive examination of the extant medical error disclosure literature, this paper presents a framework for conceptualizing the barriers to full and effective disclosure. The framework consists of four main categories: tangible sanctions for physicians, health care norms and attitudes towards medical error, causal uncertainty surrounding the error trajectory, and physician weighing of harms and benefits of disclosure for patients. We suggest that by having this organized framework, the salient issues in medical error disclosure will become more visible and accessible to both health care professionals and policy makers, as well as to medical researchers. The framework also facilitated the emergence of themes—such as a broader conception of professionalism—whose considerations we assert could stimulate productive discussion towards reducing the present gap between policies that advocate for full disclosure and actual disclosure practices in Health Care Organizations (HCOs).

**Keywords:** Medical error; Disclosure; Organizing framework; Patient safety; Professionalism

## Abbreviations

HCOs: Health Care Organizations

## Introduction

Despite recent calls advocating for full disclosure of medical errors by physicians, the continued prevalence of nondisclosure suggests that a gap exists between prescriptive policy and actual practice in Health Care Organizations (HCOs). Why this gap exists, and how it might be reduced or eliminated, continues to drive significant academic research and policy debate. The aim of this study is to examine, organize and review the literature pertaining to these discussions of medical error and information disclosure, so as to facilitate a deepened understanding of the barriers to disclosure and ultimately support the goal of improved patient safety in health care. The methodology of the study consisted of a qualitative literature review and conceptual analysis of theoretical assumptions and normative positions that underwrite various interpretations of the present trends in disclosure practices by physicians. The result of this examination is a unique four part organizing framework with both theoretical and practical import. This framework, which is presented below, is used to draw out themes that we believe warrant further analysis and consideration by both the practicing and academic communities.

### Tangible sanctions for physicians

Perhaps not surprisingly, the most commonly identified barriers to disclosure are the tangible sanctions that physicians face in the wake of medical error commission. These sanctions can emanate from punitive professional or workplace policies, as well as from legal or financial damages assessed by the courts. This section discusses both types of sanctions in terms of the problems they present for patient safety. It then draws upon a conception of professionalism

in health care underlying present research as a means of dissembling these tangible barriers to disclosure.

In many HCOs, punitive policies are applied to physicians who commit medical errors. Although professional or workplace sanctions, in theory, can serve as a deterrent to the repeated commission of errors, fear of such sanctions and their resulting damage to careers [1,2] are likely to lead to a default position of “deny and defend” by physicians [1]. This positioning actually undermines the ultimate goal of patient safety since valuable learning opportunities are lost for physicians and their organizations regarding the systemic origins of errors [3]. As such, errors continue to occur.

The present perception of a hostile medico-legal environment further perpetuates this cycle of error by reinforcing the silent or defensive behaviour of physicians following adverse events. In the United States in particular, tort law holds physicians at risk of financial damages in malpractice suits [4]. Defense lawyers therefore routinely encourage their clients not to fully disclose information about an error commission, nor to make explicit apologies to patients, fearing that these actions will be interpreted as admissions of guilt and held against physicians in court [5]. Insofar as physicians perceive that they stand more to lose due to threat of litigation than to gain by speaking out, the root causes of errors will remain undetected, leading to the likelihood of re-occurrence. Both accountability within the system and improvement to the system are hindered within this punitive medico-legal environment [6].

In an attempt to counter the legal liability concerns of medical professionals, there are a growing number of apology laws in place in various jurisdictions in Canada and the US. These laws are designed to protect health care providers in court in the event they admit to and apologize for an error [3]. At this stage, however, empirical evidence fails to support a positive correlation between the introduction of

these laws and either increased disclosure rates in HCOs, reduction in malpractice suits, or institutional savings in litigation costs [7,8].

What the extant research does suggest, however, is that in malpractice suits judges look beyond simply the apology, and to the indicted physician's full communication with patients and their families post-adverse event [7]. This broader examination is done to more fully determine the extent to which the physician's behavior exhibits a continued commitment to standards of care and professionalism. Examples here include assuming full responsibility for the error, providing an informative and accessible explanation as to how and why the error occurred, issuing a timely and emphatic apology, and taking steps to remedy the resultant harm [8].

Indeed, a growing body of research now suggests that full disclosure on the part of physicians tends to prevent rather than promote malpractice suits [7,8]. This prevention is attributed to the belief that an important motivating factor for patients in filing suits is a desire for information they feel they are entitled to receive following an adverse event [7,8]. Hence, such things as poor communication, cover-up behaviour, inadequate follow-up treatment, insufficient compensation, and lack of responsibility assumed for the error, are cited as primary reasons for patients to undertake legal action—not the error commission itself [7].

In short, the present research regarding medico-legal barriers and error disclosure is mixed. On the one hand, it is clear that the perceived threat of litigation discourages physicians from disclosing errors and propagates a cycle of cover-up behaviour that is inimical to improved patient safety [4,8]. On the other hand, it is unclear whether hesitancy to disclose due to threat of litigation is rationally warranted. This is because it is still unclear whether: (i) undertaking the full disclosure of a medical error can make a physician liable to a malpractice suit, or (ii) receiving full disclosure can make a patient less likely to file a malpractice suit. Since (i) and (ii) stand at odds with one another, both require further empirical research before useful policy conclusions can be drawn on their basis. This leaves the following conclusion: (iii) in the event that a malpractice suit is filed, responsibly performing disclosure duties can ultimately serve a physician's interests in court.

This last conclusion (iii) represents an important theme underlying the association between medical error and quality of care, and constitutes a potentially powerful argument in favor of disclosure. The argument is that the legal norms guiding how judges determine fault presupposes a conception of "physicians as professionals" that considers post-error behavior such as disclosure and apology as being a continuation of quality care owed to patients. In a recent paper, Vincent et al articulate this conception as follows: "the care of an injured patient is, at bottom, little more than the continuing duty of care routinely assumed by all physicians and HCOs" [9].

In essence then, the fiduciary relationship between providers and patients does not automatically dissolve in the event of a medical mistake. Rather, the relationship enters new territory in the care process characterized by further information exchange and further shared decision-making regarding new or altered treatment options. Absent this conception of physicians as professionals, in the event of an error, a physician may err twice in the process of care—once by

actions leading to the initial harm, and again by failing to report and discuss the error openly with the patient [10].

Many provinces in Canada have already introduced disclosure policies that reflect this shift in emphasis towards a more robust conception of professionalism that includes disclosure as a standard of care. By replacing tangible sanctions for error that encourage "deny and defend" positions by physicians with channels of communication and accountability (e.g. voluntary and confidential reporting systems) that encourage transparency and a commitment to patient safety, the self-propagating cycle of error in health care can be broken [11].

### Health care norms and attitudes towards medical error

A second and related category of barriers to disclosure comprises the intangible norms that permeate the health care environment. For example, the hierarchy that exists within the ranks of medical professionals is such that junior physicians may fear that admitting to or reporting their errors will hamper prospects of advancement; nurses may feel ill-assured of their role responsibility in reporting errors in the line of care; and senior physicians may be wary that a damaged reputation or blow to their authority will accompany admittances of error [6]. Furthermore, the spirit of competitiveness and perfectionism that residents are immersed into in the early stages of their careers equips them to protect themselves from criticism [8], rather than to pursue the lines of communication that form an integral part of a supportive environment wherein individuals can discuss, accept, and learn from their mistakes [11].

Public perceptions of error and expectations regarding quality of health care and the performance of physicians have a considerable impact on medical culture [9]. Patients and their families enter into fiduciary relationships with providers on the back of a set of expectations pertaining to the care they seek. These expectations can be heavily laden with general public perceptions of what the health care system aspires to be. When these expectations reflect a highly idealized perception of the medical professional as epistemically infallible, a flawless communicator, and ethically judicious, there is no room for error.

All of these norms stem from and feed into the attitude in health care that mistakes are unacceptable. But the reality is that physicians are human, with human cognitive capacities, human technical abilities, human susceptibilities to fatigue and lapses in attention, and human biases in decision-making [4]. Moreover, health care delivery is complex, constantly evolving, multi-faceted, and under-resourced. Physicians work long, strenuous hours; they face unknowns and new cases equipped with a given set of decision-making strategies, cognitive skills, knowledge base, and experience under their belt [11]; they also face ethical dilemmas in virtue of day-to-day high-stake interactions with other human beings who have different sets of interests and values. Physicians inevitably make mistakes in their capacities as caregivers—in part due to the environment they work in, and in part due to the inescapable imperfection of human nature [12]. The attitude that mistakes are unacceptable or unforgivable underwrites perceptions of health care providers by the general public and providers alike. This attitude perpetuates a health care environment that is plagued by underreporting and non-disclosure of errors, and thus compromises quality of care for all involved.

The problem of nondisclosure pertaining to the attitude

towards error is further exacerbated given that conceptions of what constitutes an error can differ widely between patients and the medical establishment [5]. Patients consider quality of service to include physician responsiveness to patient fears and concerns such that they feel cared for and safe. Communication issues thus form a substantial subset of patient perceptions of error, whereas the standard medical conception of error is much narrower [11]. This strongly suggests a need for the expectations of those seeking care and those providing care to be aligned, so that attitudes can be adjusted to reflect a common commitment to patient safety, quality care, and error prevention that better reflects the reality of the health care system wherein services are exchanged.

The first step in this direction requires valuing awareness and transparency. All parties need to be willing and comfortable to talk about the phenomenon of medical errors: how, when, and why they occur, and what can and ought to be done about them. As part of this discussion, physicians should be recognized as fallible human beings in partnership with patients. Disclosure, honesty, and open-communication should be encouraged as part and parcel of the standard of care [3,11]. Emphasis should be placed on system deficiencies rather than individual failures [3,11,13] so as to move away from a culture of blame characterized by responses of deny and defend and towards a culture of safety characterized by disclosure, open discussion and commitment to continuous improvement [3,11].

The question here arises as to whether a change in norms, attitudes and behaviour as suggested above can be effectively brought about by the introduction of disclosure policies in HCOs. The tension between official codes of conduct and learned behaviour presents a very real problem for closing the gap between prescriptive disclosure and its actual practice. For example, physicians routinely express discomfort or lack of confidence at the prospect of communicating the occurrence of an error to a patient [14] despite the existence of a disclosure policy they can consult.

Oftentimes, disclosure guidelines or training for staff are simply inadequate insofar as they fail to meet the needs of both physicians and patients. As such, physicians feel ill equipped to effectively undertake the task of disclosure, and patients respond to the disclosure messages negatively. A disclosure plan has been suggested by Petronio et al that caters to the needs and interests of both physicians and patients for the dual purposes of managing tensions of information ownership and maintaining the fiduciary relationship [15]. The disclosure process has two parts. First, physicians require epistemic preparations (e.g. making inquiries into all the facts and circumstances in the error trajectory) and emotional preparations (e.g. discussing their personal feelings with leaders or peers) so as to ready themselves for an informative and compassionate interaction with patients. Second, the content and delivery of the disclosure message itself should follow communicative strategies that ensure the message is accessible and relevant to the patient. These strategies include incremental sequencing allowing for the patient to process the information, appropriate forecasting and pace of delivery, attention to patient questions and concerns, and the inclusion of a meaningful apology [15].

But even in the event that disclosure policies such as the one outlined above are in place in HCOs, the gap between policy and

practice remains a problem. Physicians may still feel a sense of unfamiliarity or disconnect with the given guidelines or rules—quite possibly in virtue of their codified form. Management research suggests that attitudes and norms drive and influence behaviour in a dynamic and flexible workplace more than rules [2,14]. Which is to say, even if a given disclosure plan is good in theory, its translation into practice and the inculcation of its underlying norms into the daily environment of health care professionals is a whole other issue.

One counterargument here, made from the standpoint of evidence based management practice, is that the presence of organizational policies and training programs for physicians can signal values of an institution such as honesty and integrity that are also important to all employees. Rathert et al state, “disclosure practices may ultimately link to deeply held values of care staff” [2]. This in turn can translate into organizational commitment of employees to the goals of the institution that they actively share in. Insofar as organizational dynamics greatly impact patient care, organizational commitment of employees can lead to reduced rates of error. It therefore follows that disclosure policies can indirectly—via mediating factors such as shift towards a values-based workplace environment—lead to increased quality of care and patient safety [2].

Finally, a shift of emphasis at the level of medical education is often cited as being a better catalyst for change in professional behaviour than the external introduction of disclosure policy by non-physician organizational management [14]. The argument runs as follows. Individual development of value-based attitudes and responses implicit in the activity of disclosure should be initiated in the early stages of a medical resident’s career. This is because effective communication skills, moral proclivities and perceptive empathic faculties [5] are not acquired by adhering to policies or rules, but are developed over a long period of time through exposure to particular climates, peers, and leaders [2, 14]. For disclosure to be effective, its component skills and underlying values of honesty, sensitivity, empathy, and communication must be incorporated into the medical environment at all stages. It is not enough for professionals to simply consult a step-by-step procedure in the event of an error.

### **Causal uncertainty surrounding error commission**

A third category of barriers which result in a hesitancy to disclose arise due to causal uncertainty regarding the multifaceted nature of the error trajectory. As errorology has shown, latent errors in the system can arise from such things as heavy workloads or high rates of patient turnover, or even from minor deviations from expected protocols by various system operators [3,13]. The number of agents involved in the line of care and the complex manner in which systemic factors interact with active or passive actions of those agents makes it a difficult task to pinpoint the causal contribution of any one individual to an adverse outcome [16]. This consequently raises questions as to what occurred, how and why it occurred, who played a role in the occurrence, and who should be responsible for disclosure. Hesitancy to disclose on the part of providers can thus derive from a lack of definitive answers to these myriad related questions.

This causal uncertainty can consequently bring about the diffusion of responsibility between members of the care team involved in the error trajectory [8]. As Walton points out, root cause analyses almost always trace an error trajectory back to a latent systemic flaw [13].

This then raises the important concern as to whether “systemic” origins of errors, and its resultant protection of physicians from culpability, means that accountability gets lost in translation [13]. Undoubtedly, in some cases, standards of care are breached by individuals—not in a malicious or negligent way, but in the form of cutting corners or taking shortcuts to protocol as a means of coping with the productivity pressures of the workforce. This behaviour, although given the systemic grounds to flourish, is still unprofessional and can compromise patient safety [13]. Notably, some researchers assume a position of “agent causation” to stress that actions of individuals are never fully determined by a causal chain of events—that is, individuals always possess the freedom to act otherwise [17]. This incompatibilist metaphysical stance is at odds with many of the underlying assumptions in the prevalent “systems theory” which underlies much of the medical error literature. Specifically, the major incompatibilist claim is that “system-events do not deterministically cause patient errors” [17].

Philosophical debates aside, Walton and others stress that a safer health care environment is more likely when individual accountability is not lost “within the system” [6,13]. That is, in the event of error, someone must assume responsibility and convey that message of responsibility to the patient directly affected by the error. Research tells us that patients wish for apologies of responsibility rather than apologies of empathy, and just as importantly, wish for a face to accompany this apology [1]. System scan neither meaningfully apologize nor assume responsibility in the way that matters to patients following adverse events. Attributing responsibility to a “faceless system” during disclosure can make the patient feel even more overwhelmed, vulnerable, and resentful than they already feel as a result of the error itself [1]. These psychological and emotional responses are not conducive to positive health, and are not what the patient—already suffering the harm of an error—is owed.

Ambiguity of error cause may also arise where it is unclear whether changes in prognosis or treatment are the result of a preventable error per se or simply an unanticipated complication of the illness itself [7]. For example, foreseeable but statistically unpredictable complications in caregiving can occur despite physicians upholding acceptable standards of care in their performance [16]. Consequently, it becomes difficult to establish causal connections between the occurrence of errors and final outcomes of patient health. It would, however, indicate a significant lapse in ethical judgment on the part of a physician if they were to knowingly attribute harms resulting from errors in care onto the patient’s disease [11].

In sum here, it is undoubtedly challenging to confidently identify the cause of error in large, complex systems, or where reactions to treatment differ across individuals in often unanticipated ways. Nevertheless, there is a crucial distinction which needs to be made between uncertainty of error and denial of error [1]. We have previously argued that reporting of incidents and follow-up investigations should be a standard practice especially where uncertainty exists [3,11], as uncovering all the facts pertaining to a patient’s treatment is part and parcel of the respect and care owed to them as both autonomous and vulnerable agents. To enable this, it is important for care teams to have a conceptually clear and practically relevant definition of “medical error” at hand that can help resolve ambiguous cases [15].

## Problematic disclosure cases and ethical deliberation

A fourth and final category captures those discussions which examine the difficult choices medical practitioners often face as to whether patients are actually better off knowing all aspects of their treatment or whether more harm than good may result from disclosure. For example, physicians are much less likely to disclose errors if the error is detected and corrected for in the process of care prior to being converted into harm, or if the error ultimately has no effect on the medical management of the patients’ illness [8,16]. This suggests that the behavioral responses of physicians implicitly follow the “proportionality rule” [1]. This rule suggests that the moral imperative to disclose errors in care increases as the resultant harm to patient’s increases, and vice versa.

Physicians, patients and families are also divided on the issue of whether “near misses” (i.e. an error that nearly occurred save for mitigating circumstances) should be disclosed [8]. Some patients feel they are owed all relevant information regarding the care process in virtue of its intrinsic relation to their own health and personhood; others express the desire to be informed of only what is necessary to make treatment decisions or is relevant to changes in prognosis [8]. Differences in this regard vary by personality type, complexity of treatment, and the extent to which patients wish to play an active role in decision-making and delivery of care [9].

Physicians, when weighing harm against good, may withhold disclosure for fear that the patient or family may undergo psychological distress at the thought that an error nearly occurred. Some physicians also believe that the information about the mitigating circumstances and description of the error may be too technical or cognitively unfamiliar for patients to fully comprehend and appreciate [8,16]. Banja states here, “the error trajectory is so complex that professionals believe the listener will not understand its description” [16]. The exercise of paternalism on the part of physicians in these types of cases depends on the dynamic of the fiduciary relationship in question. Contextual factors such as imbalances of knowledge, perceptions of vulnerability and authority, and the communication of opinions, interests, and values of both parties, often determine whether or not physicians choose to disclose near misses or trivial errors to patients [16].

In contrast, a recent paper by Scheirton argues that physicians should never exercise paternalism if this involves withholding information [1]. Physicians’ duty to disclose exists regardless of considerations of the degree of resultant harm, the seriousness of error, or estimates about the cognitive, psychological or emotional responses of patients to the information. Here the author employs a deontological argument for the physician duty to tell the truth, claiming this moral obligation cannot logically accommodate exceptions. Specifically, insofar as the fiduciary relationship is based on trust, and trust requires honesty, openness, and sharing of information, the relationship is inherently undermined by any decision not to disclose. The duty to disclose is thus universally mandated in virtue of the unspoken agreement between patient and physician. There is no room in the fiduciary relationship for physician cover-ups of trivial harms, or cases of “therapeutic exception” [1]. Wojcieszak et al voice support for a similar blanket-rule for disclosure, claiming that disclosing is in all cases simply the “right thing to do” [7].

For Scheirton, the notion of patient vulnerability is key to decision-making surrounding disclosure of information [1]. Patients, in virtue of the various reasons for which they seek medical care, are in a position of vulnerability in the fiduciary relationship. They are also at an epistemic disadvantage to the physician whose services they require in terms of medical expertise and access to resources. Patients therefore rely on health care staff to attend to their health and safety, and thus implicitly trust that providers will perform their role to the best of their abilities. Due to the inherent nature of the relationship between patients and physicians—obligated by vulnerability and held fast by trust—Scheirton argues that decision-making in the context of patient safety should be guided by the “view from below” rather than the “proportionality rule” [1]. Adopting the patient perspective means attending to their perceptions, needs, values, interests, wishes and choices as clues to the right course of management of information.

Vincent et al likewise claim that more attention should be paid to the role that patients can play in ensuring quality of care and preventing medical mistakes [9]. However, Vincent et al think that patient safety is best served by a move away from viewing patients as passive agents or vulnerable recipients of care, and towards viewing them as co-producers of care in partnership with physicians. The authors suggest the following: taking patient testimony seriously as evidence; providing patients with full and frank information regarding their prognosis and treatment options; striving for transparency in HCOs with respect to adverse event rates reporting; providing consumer guidelines about what to expect from their care; and encouraging patients to report adverse events they witness directly to central databases [9]. Ideally, encouraging the active role of patients in health care institutions will serve to reduce the burden on staff and health care resources, and lead to better overall quality of care.

Buetow et al go so far as to claim that that patients have a moral responsibility to guard against errors in their care [17]. This responsibility derives from their role as co-producers of care, their capacities to understand, reason, and foresee harm, and their possession of moral agency. While physician are responsible “to” patients, patients are responsible “for” themselves—notwithstanding the relevant circumstantial restraints of health care institutions [17].

These sorts of normative discussions about the nature of the fiduciary relationship and the roles of physicians and patients in health care are vital to any informed and effective policymaking regarding the issue of medical error disclosure. These discussions lend us clues as to where the duty to disclose derives from—for example, whether it is more closely connected with the biomedical principle of non-maleficence (i.e. do not harm) or the principle of patient autonomy (i.e. respect individual rights to information ownership). Ethical deliberation of these issues can help physicians and policy-makers decide what course of action to take in each particular case. For example, is it to disclose versus not disclose? Is it to exercise the therapeutic exception versus provide all relevant information to encourage informed decision-making?

## Conclusion

The extant literature on medical error disclosure reveals it to be both an important issue for improved patient safety, as well

as a multifaceted and complex issue with no easy policy answers. This review paper organizes this complexity by setting up four broad categories of existing barriers to disclosure, drawing on the perspectives and methods of conceptual analysis employed in the philosophical discipline. These categories include: the tangible sanctions facing physicians in the present medico-legal environment; norms of behaviour and attitudes towards error exhibited by physicians and patients alike; the causal uncertainty surrounding the error trajectory and the potential for a diffusion of responsibility; and physician weighing of harms and benefits of disclosure for patients in particular cases. We also draw from the categories four important themes and concepts that can serve to stimulate fruitful future debates and discussions. These themes include: a broader conception of professionalism that incorporates disclosure duties; re-thinking the relationship between the codification of action via formal policy and resulting change in the norms, behaviour and attitudes that presently underwrite health care culture; finding a place for individual accountability for error within a “no blame” system; and deliberating the normative origins of a physician’s duty to disclose to patients that can guide decisions in tough cases. These themes deserve further attention within both the practicing and academic medical disciplines with the aim of closing the gap between prescriptive policy and actual disclosure practice in HCOs.

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