

**MEDICAL ERROR COMMUNICATION:  
POLICY AND PRACTICE**

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## **SUMMARY**

The issue of medical errors and patient safety has been a central concern to health systems around the world since alarming statistics relating to the frequency, harm, and costs of medical errors were published in the United States in 2000. Subsequent research has made it clear that this is a worldwide issue, with available data suggests that medical errors cause disabling injuries or death to nearly one in ten patients. In recent decades there has been a dramatic change internationally in the approach to medical errors, with a new ethic of transparency replacing the traditional customs of secrecy and denial. It is seen as important that medical errors are reported within the hospital so that opportunities for systems improvements can be identified and addressed. Clinicians are also now widely considered internationally to have an ethical, professional and legal obligation to disclose medical errors to patients. There remains, however, a large communication ‘gap’ between expected practice and what is actually being done, with research indicating that errors are often not reported within hospitals or disclosed to patients. There currently exist a number of important research gaps concerning medical error communication, particularly regarding the disclosure of errors to patients, in Switzerland and internationally.

### **Medical Error Communication in Switzerland**

There is currently a shortage of empirical data regarding error communication in Switzerland. The primary aim of this research project was to therefore empirically examine current policy and practice in Switzerland in relation to error communication, with a particular focus on the disclosure of medical errors to patients. This was chiefly achieved through conducting three empirical studies: a quantitative survey of Swiss hospitals, a quantitative survey of Swiss anaesthesiologists, and qualitative interviews with key stakeholders in Switzerland. In

addition, data from qualitative interviews conducted with Swiss nurses by a medical master student were used.

### *Quantitative Survey of Swiss Hospitals<sup>1</sup>*

There is currently no data published on how many Swiss hospitals currently have implemented an internal error disclosure standard. Given that a lack of institutional support can be a significant barrier to error communication, and that organizational standards have been shown internationally to be an important factor in encouraging error disclosure, a quantitative survey of Swiss hospitals was therefore conducted to establish what stage Swiss hospitals are currently at in implementing an internal standard concerning error communication. Responses from a total of 205 hospitals were received, a response rate of 54%. Less than half (46%) of responding hospitals reported currently having an error disclosure standard, 16% reported that they are planning to implement one in the next 12 months, and more than a third (38%) had not implemented an error disclosure standard and had no plans to do so. The majority of responding University and Acute Care (75%) hospitals reported that they had introduced a disclosure standard or were planning to do so. In contrast, the majority of responding Psychiatric, Rehabilitation and Specialty (53%) clinics reported that they had not introduced a standard. The finding that a majority of hospitals were aware of the issue of communicating medical errors and had already taken active steps to establish a culture of dealing with them was promising. Furthermore, the implementation of standards across cultures and languages in Switzerland, a country with an emphasis on decentralisation, shows that changes in the medical system towards more transparency and open communication with patients are being recognised as universally needed. However, Swiss

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<sup>1</sup> **Article 1:** McLennan, S., Engel, S., Ruhe, K., Leu, A., Schwappach, S., Elger, B. (2013). Implementation Status of Error Disclosure Standards Reported by Swiss Hospitals. *Swiss Medical Weekly*, 143: w13820.



hospitals need to take further actions regarding this issue. The fact that more than one third of the hospitals reported not having an internal standard should be examined further in order to find explanations and identify obstacles that keep those institutions from implementing one.

### *Quantitative Survey of Swiss Anaesthesiologists*

Clinicians' attitudes and experiences in relation to error communication remain poorly understood in Switzerland and little is known about the impact of error involvement on clinicians outside the North America. A quantitative survey of clinically active anaesthesiologists working in Switzerland's five university hospitals' departments of anaesthesia was therefore conducted to further knowledge regarding these issues. Responses from a total of 281 anaesthesiologists were received, a response rate of 52%.

In relation to error communication,<sup>2</sup> virtually all respondents agreed that serious errors should be reported to the hospital, but agreement rates were lower for minor errors (74%) and near misses (59%). Only 63% agreed that current reporting systems are adequate. Strong agreement that serious errors should be reported was more likely if they also thought reports would be used to improve patient safety. While all respondents agreed that serious errors should be disclosed to patients, 23% of respondents disagreed that minor errors should be disclosed. Only 12% had received disclosure training, although 93% wanted training. Willingness to report or disclose medical errors varied strongly between hospitals. Heads of department and hospital chiefs thus need to be aware of how important local culture seems to be when it comes to error communication. Improving feedback on how error reports are being

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<sup>2</sup> **Article 2:** McLennan, S., Engel-Glatzer, S., Meyer, A.H., Scheidegger, D.H., Elger, B. (2015). Disclosing and Reporting Medical Errors: Cross-sectional survey of Swiss Anaesthesiologists. *European Journal of Anaesthesiology*, 32(7), 471-476

used to improve patient safety and increasing error disclosure training may also be important steps in increasing anaesthesiologists' communication of errors.

Regarding the impact of errors,<sup>3</sup> respondents commonly experienced distress following an error, even after a minor error or near miss, with 90% reporting that at least one of the five areas of their lives were negatively affected. Ninety percent disagreed that hospitals adequately support after an error. Nearly all (92%) reported being interested in psychological counselling after a serious error, but many identified barriers to seeking counselling. However, there were significant differences between departments regarding error-related stress levels and attitudes about error-related support. Respondents were more likely to experience certain distress if they were female, older, had previously been involved in a serious error, and were dissatisfied with their last error disclosure. Medical errors, even minor errors and near misses, can have a serious effect on clinicians and healthcare organisations need to do more to support clinicians in coping with the stress associated with medical errors.

#### *Qualitative Interviews with Key Stakeholders*

This was the first time that key stakeholders have been interviewed in Switzerland to explore their attitudes about medical errors and error communication and their views about what measures could lead to improvements in Switzerland. A total of 23 Swiss key stakeholders were interviewed. Two important themes to emerge from these interviews were the issue of criminal liability and liability insurance.

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<sup>3</sup> **Article 3:** McLennan, S., Engel-Glatzer, S., Meyer, A.H., Schwappach, D., Scheidegger, D.H., Elger, D. (2015). The Impact of Medical Errors on Swiss Anaesthesiologists: A Cross-Sectional Survey. *Acta Anaesthesiologica Scandinavica*, 59, 990-8.

Concerning criminal liability in Switzerland,<sup>4</sup> many participants expressed concerns that Switzerland currently has the threshold for criminal liability set too low, and thought that clinicians' fears about criminal liability were a major barrier to error communication and quality improvement. Participants thought that the option of criminal liability needed to be there for "extreme cases", but many felt it was inappropriate to be treating clinicians as criminals for making unintentional slips or mistakes that result in harm. A strong case can be made that Switzerland currently has the bar for criminal liability in relation to patient harm set too low. Empirical and theoretical considerations suggest that the use of the criminal law for any medical error, regardless of its outcome, is inappropriate and likely to do more harm than good. The growing international calls for the focus of the criminal law in the context of patient harm to be upgraded and narrowed to wilful and reckless conduct is endorsed. While major changes to Swiss criminal law in the foreseeable future are unlikely, further discussion and research is needed on this issue.

In relation to liability insurance in Switzerland,<sup>5</sup> participants, particularly those with a legal or quality background, reported that concerns relating to liability insurance are often inhibited communication with patients after a medical error. Healthcare providers were reported to be particularly concerned about losing their liability insurance cover for apologising to harmed patients. It was reported that the attempt to limit the exchange of information and communication could lead to a conflict with patient rights law. Finally, participants reported that hospitals could, and in some case are, moving towards self-insurance approaches, which could increase flexibility regarding error communication. The reported current practice of at

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<sup>4</sup> **Article 4:** McLennan, S., Elger, B. (2014). Criminal Liability and Medical Errors in Switzerland: An Unjust System? *Jusletter* 27 January 2014: [http://jusletter.weblaw.ch/article/en/\\_11937](http://jusletter.weblaw.ch/article/en/_11937).

<sup>5</sup> **Article 5:** McLennan, S., Shaw, D., Elger, B. (2015). Professional Liability Insurance and Medical Error Disclosure. *Swiss Medical Weekly*, 145: w14173.

least some liability insurance companies in Switzerland of inhibiting communication with harmed patients after an error is concerning and requires further investigation. With a new ethic of transparency regarding medical errors now prevailing internationally, this approach is increasingly being perceived to be misguided. A move away from hospitals relying solely on liability insurance may allow greater transparency after errors. Legalisation that prevents the loss of liability insurance coverage for apologising to harmed patients should also be considered.

### *Qualitative Interviews with Swiss Nurses*<sup>6</sup>

Nurses are another group of clinicians whose views concerning disclosing errors to patients remain poorly understood in Switzerland and Continental Europe in general. Qualitative interviews were therefore conducted by a medical master student with a total of 18 Swiss nurses. While nurses recognised patients' right to be informed errors, the majority thought that many errors were concealed from patients in practice. Nurses identified a number of barriers to error disclosure that have already been reported in the literature, such as legal consequences and the fear of losing patients' trust. However, nurses more frequently reported personal characteristics and a lack of guidance from the organisation as barriers to disclosure. Both of these issues point to a lack of a systematic institutional approach to error disclosure in which the decision to inform the patient should stem from within the organisation and not be shouldered by individual nurses alone.

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<sup>6</sup> **Article 6:** McLennan, S., Diebold, M., Rich, L.E., Elger, B. (2016). Nurses' Perspectives Regarding the Disclosure of Errors to Patients: A Qualitative Study. *International Journal of Nursing Studies*, DOI: 10.1016/j.ijnurstu.2014.10.001.

## **Medical Error Communication Internationally**

This research project also includes theoretical research on error communication internationally, due to this author's background and international collaborations.

### *Error Disclosure in Continental Europe<sup>7</sup>*

Very little is known about error disclosure practice and policies in Continental Europe. The regulation of error disclosure in Germany was therefore examined. The issue of error disclosure was found to currently play no significant role in German health policy. However, a number of aspects of the wider regulatory framework appear to be supportive and a recent brochure published by the German Coalition for Patient Safety's appear to be a positive step forward. However, without legal certainty and a broad consistent framework that is supportive of error disclosure, it was argued that it seems unlikely that the attitude and behaviour of clinicians will change towards more transparency and openness. Findings from Germany are also potentially useful for neighbouring civil law countries such as Switzerland and Austria.

### *Apologies and the Law*

The law has been used in a number of countries internationally in an attempt to make sure an apology is given to patients after a harming causing error, including "apology laws" which protect apologies from being used a proof of negligence in legal action, and authorities requiring clinicians to apologise to patients after things go wrong. The ethical and legal appropriateness of these uses of the law were examined.

In relation to apology laws in Australia,<sup>8</sup> the new Australian Open Disclosure Framework now specifies that the words 'I am sorry' or 'we are sorry' should be included in an apology

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<sup>7</sup> **Article 7:** McLennan, S., Beitat, K., Lauterberg, J., Vollman, J. (2012). Regulating Open Disclosure: A German Perspective. *International Journal for Quality in Health Care*, 24(1): 23-27.

or expression of regret. All Australian states and territories have apology laws however commentators have recently argued that law reform is needed to provide stronger protections for the contents of open disclosure conversations. It was argued that laws that make compassion inadmissible or that protect truthful expressions of responsibility are unnecessary and operate on ethically shaky ground. Hospitals supporting clinicians through the disclosure process is likely to have a far greater impact.

Regarding to apology laws in Canada,<sup>9</sup> such laws are now enacted in 8 out of 10 provinces and 2 out of 3 territories in Canada. It remains to be seen whether these laws will achieve their goals of encouraging apologies and open communication and reducing litigation. However, it was argued that they will unlikely lead to substantial improvements in patients' experiences following an adverse event. Disclosing, and apologizing for, an adverse event is one of the most complex and difficult conversations to have in healthcare. Therefore, without good training and support in this process, apology legislation is unlikely to have much of an impact on the behaviour of health care staff.

Concerning forced apologies New Zealand,<sup>10</sup> clinicians are commonly required to provide an apology to a complainant by the Health and Disability Commissioner (HDC) in New Zealand. Even though other jurisdictions may not have an authority like the HDC that requires apologies, coercion may be exerted by many parties. Although apology serves several important social roles, it was argued that apologies that stem from external authorities' edicts rather than an offender's own self-criticism and moral reflection are inauthentic and

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<sup>8</sup> **Article 8:** McLennan, S.R., Truog, R.D. (2013). Apology laws and open disclosure. *Medical Journal of Australia*, 198, 411-412.

<sup>9</sup> **Article 9:** McLennan, S., Rich, L.E., Truog, R.D. (2015). The Legal Protection of Apologies – training would help more. Published: *Canadian Medical Association Journal* 2015, 187, E156-159.

<sup>10</sup> **Article 10:** McLennan, S., Walker, S., Rich, L.E. (2014). Should Health Care Providers Be Forced to Apologise After Things Go Wrong? *Journal of Bioethical Inquiry*, 11, 431-435.

contribute to a “moral flabbiness” that stunts the moral development of both individual clinicians and the medical profession. Rather than requiring clinicians to apologise, authorities should instead train, foster, and support the capacity of providers to apologise voluntarily.

## **CHAPTER 1: INTRODUCTION**



## **1.1. Medical Errors: An International Issue**

Healthcare embraces a full range of services “whose primary purpose is to promote, restore or maintain health” (World Health Organization, 2000, p. 5), and as fragile embodied beings, healthcare is something that all of us are likely to require at various points in our lives. Healthcare, however, is not an exact science and errors inevitably and regularly occur. Indeed, Marianne Paget argued in her landmark book *“The Unity of Mistakes: A Phenomenological Interpretation of Medical Work”* that mistakes are an intrinsic feature of medical work which she calls an “error-ridden activity” precisely because it is inexact, uncertain and practised on the human body (Paget, 2004).

The issue of medical errors and patient safety has been a central concern to health systems around the world particularly since the Institute of Medicine published its first report, “To Err Is Human” (Institute of Medicine, 2000). Indeed, it was partly as a result of this report that the Swiss Patient Safety Foundation was founded by the Ministries of Health and Social Security, several professional associations and the Swiss Academy of Medical Sciences in 2003.

The Institute of Medicine’s report included some alarming statistics. For instance, it estimated that between 44,000 to 98,000 persons die from medical errors in United State hospitals every year, implying that medical errors at least the 8th leading cause of death in the United States. New York Times compared this as equivalent of three jumbo jets crashing every two days. As the reporter noted, “If the airlines killed that many people annually, public outrage would close them overnight” (cited in Banja, 2005, p. 2). While there was initial resistance to the report’s statistics on the number of deaths associated with medical errors, as Sharpe has noted “...these challenges have been effectively silenced by the preponderance of evidence that the rate of harmful medical error – with its enormous human and financial consequences in death,

disability, lost income, lost household production, and health care costs – is unacceptable (Sharpe, 2004, p. 2).

Research in Australia (Wilson et al., 1995), the United Kingdom (Vincent et al., 2001; Sari et al., 2007), Denmark (Schiøler et al., 2001), New Zealand (Davis et al., 2002), Canada (Baker et al. 2004), France (Michel et al., 2007), Spain (Aranaz-Andrés et al., 2008), the Netherlands (Zegers et al., 2009), and Sweden (Soop et al., 2009) has made it clear that this is a worldwide issue. Available international data suggests that medical errors cause disabling injuries or death to nearly one in ten patients and that the economic cost of errors is substantial, with prolonged hospitalisation, loss of income, disability and litigation costing some countries many billions of dollars a year (World Health Organization, 2009).

The Institute of Medicine's report, and other reports like such as the UK Department of Health's "An organisation with a memory", set goals of cutting error and harm by 50% within 5 years (Institute of Medicine, 2000; Department of Health, 2000). However, despite the increased focus on patient safety, longitudinal studies suggest that there has been little improvement in the rates of adverse events (Landrigan et al., 2010).

## **1.2. The Problem: Medical Error Concealment**

It has been stated that, "...it is altogether safe to think that for the most of the twentieth century, medical errors were usually concealed from the parties who were harmed, or they were discussed in such a way that no attention was called to the error or to the professional who committed" (Banja, 2005, p. 2). In recent decades, however, there has been a dramatic change internationally in the approach to medical errors, with a new ethic of transparency replacing the traditional customs of secrecy and denial.

At the core of the patient safety movement is the open communication about medical errors. With a new “systems” concept of error causation emerging and increasingly accepted in patient safety, one that posits that most errors in fact have their origins in wider organizational factors that may lay dormant within the system before combining with individual failures to breach the system’s defences (Reason, 1990), it is seen as important to foster an environment where people feel supported and are encouraged to identify and report errors so that opportunities for systems improvements can be identified and addressed (Australian Commission on Safety and Quality in Health Care, 2008). Swiss anaesthesiologists in particular have been at the forefront of this movement, with the Department of Anaesthesia at the University of Basel setting up one of the first error reporting systems internationally in 1996 (Staender, Kaufmann & Scheidegger, 2000).

There has also been an important shift towards openness regarding medical errors and their communication to patients. Clinicians are now widely considered internationally to have an ethical, professional and legal obligation to disclose medical errors to patients (Massachusetts Coalition for the Prevention of Medical Errors, 2006; Canadian Patient Safety Institute, 2008; Australian Commission on Safety and Quality in Health Care, 2008; New Zealand Ministry of Health, 2008; UK National Patient Safety Agency 2009). Recent research has indicated that a full and sincere apology following an error is also a key element of successful disclosure practice (Australian Commission on Safety and Quality in Health Care, 2012). Disclosure and apology practice is thought to potentially have a number of positive benefits, including assisting the recovery of harmed patients, promoting forgiveness and the early resolution of disputes, and reducing litigation and legal costs (Australian Commission on Safety and Quality in Health Care, 2012; Lazare, 2006).

There remains, however, a large communication ‘gap’ internationally between expected practice and what is actually being done, with research indicating that errors are often not reported within hospitals or disclosed to patients (Classen et al., 2011; Gallagher et al., 2006a). A number of barriers to open and honest communication about medical errors have been identified, and these are similar for both reporting errors to within the hospital and disclosing errors to patients. These barriers include a professional and organisational culture of secrecy and blame, clinicians lacking confidence in their communication skills, high workload, the belief that the circumstances or outcome of a particular case did not warrant communicating, and medicine’s traditional focus on professional autonomy and individual accountability for patient outcomes. However, the most pervasive barrier identified is clinicians’ legal fears (Iedema et al., 2011; Hartnell et al., 2012). However, while legal fears are undoubtedly a factor in some clinicians’ reluctance to communicate errors, research published in 2006 involving US and Canadian physicians suggest that the legal environment may have a more limited impact on physicians’ communication attitudes and practices regarding medical errors than often believed, and that the culture of medicine itself may be a more important barrier (Gallagher et al., 2006b).

Various measures have been put in place in a number of countries internationally in an attempt to mitigate these barriers and create a more supportive environment for clinicians to communicate errors. These have included including governmental, organisational and professional standards to promote a clear and consistent approach to error communication, specific laws which mandate the reporting or disclosure of errors in certain circumstances, and laws that protect apologies given to patients and documents created for quality improvement activities from being used in a legal action (Mastroianni et al., 2010; Studdert & Richardson, 2010).

### **1.3. Research Gaps and Needs**

There currently exist a number of important research gaps concerning medical error communication, particularly regarding the disclosure of errors to patients, in Switzerland and internationally.

#### **1.3.1. Medical Error Communication in Switzerland**

##### *Error Disclosure Guidance*

In Switzerland, medical error communication, particularly error disclosure, currently plays no significant role in Swiss health policy. At the national level, the Swiss Patient Safety Foundation led the way in bringing awareness to this issue when it translated the Massachusetts Coalition for the Prevention of Medical Errors' "*When Things Go Wrong*" into German "*Wenn etwas schief geht*" in December 2006. However, the Swiss Academy of Medical Sciences (SAMW) had not issued any comprehensive guidance regarding disclosing medical errors to patients. In 2007, the SAMW supported educational efforts in relation to the issue in its recommendations "*Aus- und Weiterbildung in Patientensicherheit und Fehlerkultur*", which states that clinicians must openly debate medical errors and obtain the skills required for communicating errors with patients and peers (SAMW, 2007). The SAMW published a new "*Leitfaden für die Praxis*" entitled "*Kommunikation im medizinischen Alltag*" in 2013 which included a subchapter on "*Gespräch über Behandlungsfehler*". However, the advice provided regarding error disclosure was rather general in nature. There does not appear to have been any research to date that has examined how current measures at the national level, such as the Patient Safety Foundation's brochure, has been received by key stakeholders and what other measures could help promote error disclosure in Switzerland.

At the organisational level, internal hospital standards on error disclosure are not yet part of quality improvement efforts in Switzerland. While such standards are part of accreditation requirements for hospitals in countries like the United States, Swiss hospitals are under no such obligation. There is currently no data published on how many Swiss hospitals currently have implemented an internal error disclosure standard. Given that a lack of institutional support can be a significant barrier to error communication, and that organizational standards have been shown internationally to be an important factor in encouraging error disclosure (Iedema et al., 2008a), it is important to establish what stage Swiss hospitals are currently at in implementing an internal standard concerning error communication to assist efforts to advance the issue of error disclosure.

#### *Attitudes and Experiences Regarding Errors Communication*

Ground-breaking work on patients' and clinicians' attitudes and experiences of regarding medical error communication, and error disclosure in particular, have been conducted by Dr Thomas Gallagher and colleagues via qualitative and quantitative surveys, in North American (Gallagher, et al., 2003; Gallagher, et al., 2006a; Gallagher, et al., 2006b; Garbutt et al., 2007). In relation to patients, a number of other studies (for instance, Iedema et al., 2008b) also indicate that patients' attitudes are very similar internationally. Patients define errors broadly and are virtually unanimous in wanting all harmful errors disclosed. However, concerning clinicians, there has been more variation, but general themes have included clinicians' defining errors narrowly, endorsing error communication in principle but a wide variation existing regarding what information they would actually communicate in practice, being concerned that such communication might create legal liability, and feeling that there is a lack of institutional support.

A Swiss study published in 2011, which examined patients' experiences and perceptions of safety in eight Swiss hospitals, found that only 25.3% of patients' who had experienced an 'safety-related event' (e.g. infection or medication error) talked to health care staff about this event (Schwappach, Frank & Hochreutener, 2011). However, clinicians' attitudes and experiences in relation to error communication, and error disclosure in particular, remain poorly understood in Switzerland and continental Europe in general. The current shortage of information about clinicians' attitudes and experiences presents an obstacle to efforts to increase open communication following medical errors.

### *The Impact of Medical Errors*

The phrase "second victims" was introduced in 2000 to highlight the significant emotional impact that physicians involved in errors can experience (Wu, 2000). Distress following error involvement is not only a tragedy for the individual clinician, but also poses risks for future patients. Empirical evidence from North America suggests that individuals involved in errors and experience significant distress (Waterman et al., 2007), and without sufficient support, often suffer burn-out and depressive symptoms, which may increase the risk for future errors and loss of empathy (Schwappach and Boluarte, 2008; Shanafelt et al., 2005; West et al., 2006; West et al., 2009). Furthermore, while physicians often desire support in coping with the stress associated with medical errors many feel that hospitals fail to adequately them (Waterman et al., 2007).

In Switzerland, the Swiss Patient Safety Foundation was the first organization in Europe the systematically examine the issue of "second victims." (von Laue, Schwappach & Hochreutener, 2012). However, little is known about the impact of error involvement on clinicians outside the North America and empirical data from Switzerland, and Europe in

general, remains limited. The Patient Safety Foundation's 2011 brochure "Täter als Opfer" (Wrongdoer as Victim) included the results of three focus groups conducted in Switzerland with physicians and nurses (von Laue, Schwappach, Hochreutener & Frank, 2011). Similar to international research, Swiss professionals reported significant emotional distress following involvement in an error. Participants also criticised the lack of emotional support following an error, especially from colleagues and superiors and called for a change of culture, particularly regarding the handling of the emotional side of an error, wishing for an independent counselling and more support. However, further quantitative data is needed to gain an understanding of the prevalence of the negative consequences following medical errors and thus the potential need for supportive measures.

### **1.3.2. Medical Error Communication Internationally**

#### *Error Disclosure in Continental Europe*

The issue of error disclosure has received growing attention from policy makers, legal experts and academic researchers, predominantly in a number of English speaking countries (Massachusetts Coalition for the Prevention of Medical Errors, 2006; Canadian Patient Safety Institute, 2008; Australian Commission on Safety and Quality in Health Care, 2008; New Zealand Ministry of Health, 2008; UK National Patient Safety Agency 2009). Disclosure now forms an integral part of health legislation and policy in these countries, with various measures having been put in place to encourage disclosure and mitigate some of the barriers to such communication. In contrast, the issue of error disclosure currently plays no significant role in most Continental European countries. While the importance of reporting incidents as part of quality improvement programmes has been recognised in many countries, lacking from the ongoing discussion has been the emphasis of the needs of patients in such situations.



This author is unaware of any empirical data relating to clinicians' attitudes and experiences regarding error disclosure, and very little is known about current practice and policies, in Continental Europe. There is therefore a need to understand these issues better.

### *Apologies and the Law*

The act of apologising carries great meaning in wider society as a means of “responding to harmed persons’ need for recognition, offering the individual or organisation the opportunity to make amends, [and] laying the foundation for a better relationship between both parties” (Australian Commission on Safety and Quality in Health Care, 2012, p. 42). A full apology is typically considered in the literature to include an acknowledgement of the harm caused, an expression of remorse or regret, and an acceptance of responsibility (Truesdale, 2012). With the development of error disclosure internationally, the role of apologies to patients harmed by medical errors has become an increasingly important consideration, with research indicating that a full and sincere apology following an adverse event is a key element of successful disclosure practice (Australian Commission on Safety and Quality in Health Care, 2012). Clinicians and healthcare organisations, however, have traditionally been reluctant to offer apologies in healthcare settings after things go wrong and, in many cases, lawyers advise against making an apology. This is due to the risk that an apology would be seen as an admission of fault or liability, and in some jurisdictions, the risk that an apology would void liability insurance coverage (Canadian Patient Safety Institute, 2006).

This situation has led the law to be used in a number of countries in an attempt to make sure an apology is given after a harming causing error. The first way the law has been used is to protect apologies given to patients from being used a proof of negligence in legal action. Such “apology laws” have been widely enacted in the United States (36 states and the District of

Columbia), Australia (all 8 states and territories), and Canada (8 out of 10 provinces and 2 out of 3 territories) (American Medical Association, 2012; Studdert & Richardson, 2010; Canadian Medical Protective Association, 2013). Meanwhile, other common law jurisdictions have also considered enacting such laws. For example, an apologies bill was proposed in Scotland in 2012 by Margaret Mitchell MSP (The Scottish Parliament, 2012). It has been argued in the United States and Australia, however, that the majority of apology laws in these countries, which provide only protect expressions of sympathy, are flawed and unlikely to achieve their goals as they do little to reduce clinicians' fear. Law reform providing more expansive protections specifically directed at the contents of error disclosure has been recommended (Mastroianni et al., 2010; Studdert & Richardson, 2010). However, there has been very little research (Bailey, Robertson & Hegedus, 2007) that has actually examined the ethical and legal appropriateness of governments enacting legislation that protects apologies and whether these laws are in fact necessary. With these laws continuing to be enacted in the United States and Canadian, calls for current laws to be strengthened in the United States and Australia, and other countries such as Scotland considering going down this path, there is a need to examine these issues.

The second way the law has been used is to require clinicians to apologise to patients after things go wrong. In New Zealand, for instance, Health and Disability Commissioner (HDC) regularly recommends that an apology be provided in investigation reports. HDC "recommendations" are more than simple suggestions that clinicians can freely choose not to follow. Such recommendations effectively amount to a requirement, given the HDC's policy of publicly naming providers who fail to comply with the Commissioner's recommendations (Health and Disability Commissioner 2008). This practice has not been examined to date. Even though other jurisdictions may not have an authority like the HDC that requires

apologies, coercion may be exerted by many parties and there is a need to reflect on how apologies can be ethically promoted after things go wrong in health care.

## **CHAPTER 2: AIMS OF THE RESEARCH PROJECT**

## **2.1. Medical Error Communication in Switzerland**

There is currently a shortage of empirical data regarding error communication in Switzerland. The primary aim of this research project was to therefore empirically examine current policy and practice in Switzerland in relation to error communication, which a particular focus on the disclosure of medical errors to patients. This was chiefly achieved through conducting three empirical studies: a quantitative survey of Swiss hospitals, a quantitative survey of Swiss anaesthesiologists, and qualitative interviews with key stakeholders in Switzerland. In addition, data from qualitative interviews conducted with Swiss nurses by a medical master student were used.

### *Quantitative Survey of Swiss Hospitals*

There is currently no data published on how many Swiss hospitals currently have an error disclosure policy. A quantitative survey of Swiss hospitals was therefore conducted with the aim of establishing what stage Swiss hospitals are at in implementing an internal standard concerning communication with patients and families following an error that has resulted in harm.

### *Quantitative Survey of Swiss Anaesthesiologists*

Clinicians' attitudes and experiences regarding error communication remain poorly understood in Switzerland and little is known about the impact of error involvement on clinicians outside the North America. A quantitative survey of anaesthesiologists working in Switzerland's five university hospitals' departments of anaesthesia was therefore conducted with the aim of furthering knowledge regarding these issues. Anaesthesiologists were surveyed because of their frequent involvement in errors and long standing interest in patient safety, and due to the personal contacts of my second supervisor Prof. Scheidegger. The initial

research plan had intended to also survey visceral surgeons to allow a comparison of disciplines; however, this was abandoned in the early stages due to the limited participation of the first department and general lack of interest of the other departments. In relation to error communication, the aim was to characterise anaesthesiologists' attitudes and experiences regarding communicating medical errors within the hospital and to patients, and to examine factors influencing their willingness to communicate errors. Regarding the impact of errors, the aim was to examine how medical errors impact Swiss anaesthesiologists in five key work and life domains, anaesthesiologists' attitudes regarding support after errors, and which anaesthesiologists are most affected by errors.

#### *Qualitative Interviews with Key Swiss Stakeholders*

There is currently no research in Switzerland on key stakeholders' general attitudes towards medical errors, perceived barriers to error communication and potential ways of improving the situation. Qualitative interviews were therefore conducted with informants in key positions in the Swiss healthcare system to address this. Two important themes to emerge from these interviews were the issue of criminal liability and liability insurance. Concerning to criminal liability in Switzerland, the aim was to examine key medico-legal informants' views regarding criminal liability in Switzerland for to medical errors, and to explore whether the current system in Switzerland is a morally meaningful and just system of culpability in light of theoretical and ethical considerations. Regarding to liability insurance, the aim was to examine key medico-legal informants' views regarding liability insurance in Switzerland in relation to medical error communication, and to evaluate the reported impact that liability insurance companies are having on error communication in Switzerland in light of international trends and ethical considerations.

### *Qualitative Interviews with Swiss Nurses*

Nurses are another group of clinicians whose views concerning errors and error communication remain poorly understood in Switzerland and Continental Europe in general. Qualitative interviews with Swiss nurses were therefore conducted by a medical master student, Martin Diebold. This author co-supervised the study (with Prof. Elger) and was significantly responsible for developing this empirical project with Martin Diebold. Part of the data collected and transcribed by Martin Diebold were able to be used as part of this research project to explore Swiss nurses' attitudes and experiences concerning disclosing errors to patients.

### **2.2. Medical Error Communication Internationally**

This research project also includes theoretical research on error communication internationally due to this author's background and international collaborations. This author is a New Zealand citizen and previously worked at the Health and Disability Commissioner's Office from 2008 to 2009 as a Complaints Assessor. Issues of communication were a common feature of the complaints received by the Office, either as one of the causes of the failure of care or in the manner the patient was treated subsequent to the harm. It was this experience that primarily sparked this author's interest in medical errors and their communication. This author is also very knowledgeable and interested in international medico-legal issues, particularly in common law jurisdictions, and has pre-existing collaborations with international researchers in their field.

### *Error Disclosure in Continental Europe*

In Continental Europe, empirical data relating to clinicians' attitudes and experiences regarding error disclosure is limited and very little is known about current practice and

policies. The current regulation of error disclosure in Germany was therefore examined with the aim of making a contribution to the international literature and to consider possible additional measures that could be implemented to further promote error disclosure in Germany. Germany was examined due to the knowledge and contacts that this author had gained from his previous experiences working in Germany. A similar article examining this issue in Austria was also planned with Assist.-Prof. Magdalena Flatscher-Thöni from UMIT. However, this was never completed due to Assist.-Prof. Flatscher-Thöni having a child. Attempts were also made to conduct the quantitative survey with Austrian anaesthesiologists. However, the Austrian Society of Anesthesiology, Resuscitation and Intensive Care (ÖGARI) felt that the survey could theoretically have a negative consequence for the participant. The board therefore concluded that according to Austrian rules, the “Betriebsrat” (work council) of all included hospitals would need to be asked for permission. This was beyond the time and resources available for this project and was therefore not pursued any further. It does, however, highlight the sensitivities and difficulties of conducting research on this topic.

### *Apologies and the Law*

Very little research has been conducted on the ethically and legally appropriate role of the law regarding promoting apologies to patients after a medical error. Apology laws and the practice of requiring clinicians to apologise were therefore examined. In relation to apology laws in Australia, the aim was to examine recent developments in Australia regarding error disclosure and to consider whether Australian apology laws are a necessary or appropriate strategy to promote error disclosure. Regarding apology laws in Canada, the aim was to examine the development of Canadian apology laws and to consider whether these laws will achieve their aims or whether other measures are required to promote disclosing, and apologising for,



adverse events. Concerning to forced apologies in New Zealand, the aim was to examine whether it is ethically appropriate to require clinicians to apologise after an adverse event.

# **MEDICAL ERROR COMMUNICATION IN SWITZERLAND**

## **CHAPTER 3: IMPLEMENTATION STATUS OF ERROR DISCLOSURE STANDARDS REPORTED BY SWISS HOSPITALS**

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## **Summary**

**Question under study:** To establish what stage Swiss hospitals are at in implementing an internal standard concerning communication with patients and families following an error that has resulted in harm.

**Methods:** Hospitals were identified via the Swiss Hospital Association's website. An anonymous questionnaire was sent during September and October 2011 to 379 hospitals in German, French or Italian. Hospitals were asked to specify their hospital type and the implementation status of an internal hospital standard that provides patients or their relatives are to be promptly informed about medical errors that result in harm.

**Results:** Responses from a total of 205 hospitals were received, a response rate of 54%. Most responding hospitals (62%) had an error disclosure standard or planned to implement one within 12 months. The majority of responding University and Acute Care (75%) hospitals had introduced a disclosure standard or were planning to do so. In contrast, the majority of responding Psychiatric, Rehabilitation and Specialty (53%) clinics have not introduced a standard.

**Conclusion:** It appears that Swiss hospitals are in a promising state in providing institutional support for practitioners disclosing medical errors to patients. This has been shown internationally to be one important factor in encouraging the disclosure of medical errors. However, many hospitals, in particular Psychiatric, Rehabilitation and Specialty clinics, have not implemented an error disclosure policy. Further research is needed to explore the underlying reasons.

### **3.1. Introduction**

Over the last decade, there has been a dramatic change in the approach to medical errors internationally, with a new ethic of transparency replacing the traditional customs of secrecy and denial. The requirement to disclose errors is increasingly incorporated into national and state laws, accreditation requirements and consensus statements in various countries, including Sweden, Canada, Australia, New Zealand, the United Kingdom, and the United States.[1-5]

The disclosure of errors has evolved internationally from a strategic response to rising legal costs focusing on organisational risk minimisation, to an ethical practice seeking to re-establish trust by meeting patients' needs and expectations following an incident. Studies conducted internationally have indicated that patients are virtually unanimous in wanting all harmful errors disclosed and seek information about what happened, why the error happened, how the error's consequences will be addressed, and how recurrences will be prevented.[6-7] Patients often consider that error disclosure "would enhance their trust in their physicians' honesty and would reassure them that they were receiving complete information about their overall care." [6] While empirical data relating to error disclosure in Switzerland is limited, a 2006 study examining patient assessments of hypothetical medical errors supported international findings; patients wanted medical errors disclosed and perceived the non-disclosure of errors negatively.[8]

There remains, however, a large 'disclosure gap' between expected practice and what is actually being done.[9] While health professionals typically endorse disclosure in principle, they often do not share information in practice, with international studies suggesting that as few as 30% of harmful errors are disclosed to patients.[10] A Swiss study published in 2011,

which examined patients' experiences and perceptions of safety in eight Swiss hospitals, found that only 25.3% of patients' who had experienced an 'safety-related event' (e.g. infection or medication error) talked to health care staff about this event.[11]

International studies examining professionals' views regarding error disclosure have consistently found a number of barriers that contribute to nondisclosure.[12] The most pervasive barrier identified is professionals legal fears, this is the case even in very different legal settings.[13] Other barriers identified include a professional and organisational culture of secrecy and blame, practitioners lacking confidence in their communication skills, practitioners fearing that patients will experience distress, and doubt about the efficacy and effectiveness of disclosure.[12] In Switzerland, a recent study confirmed that professionals expressed psychological issues when being involved in an error and a common blame culture among colleagues.[14]

Various measures have been put in place in a number of countries internationally to mitigate these barriers and create a more supportive environment for practitioners to disclosure errors, including governmental and organisational standards to promote a clear and consistent approach to error communication, specific "disclosure laws" which mandate disclosure in certain circumstances, "apology laws" to protect the contents of disclosure from being used in a legal action as proof of a professional's negligence, and professional organisations' ethics standards explicitly endorsing error disclosure.[15] International research suggests that some of these measures are having a positive impact. Rick Iedema and his team, for instance, have found that the disclosure of incidents is becoming more frequent in Australia and that one of the driving forces behind this change has been state and health organisations error disclosure policies, along with the increase of specially trained staff.[16]

In Switzerland, patient safety has become a central issue ever since the year 2000 when alarming international statistics on medical errors and associated deaths were published.[17] As a result, the Swiss Patient Safety Foundation (<http://www.patientensicherheit.ch>) was founded by the Ministries of Health and Social Security, several professional associations and the Swiss Academy of Medical Sciences in 2003. All of the Foundation's activities are designed to help improve patient safety and reduce errors in health care and it has led the way in drawing attention to the issue of error communication in Switzerland. In December 2006, the Foundation translated the Massachusetts Coalition for the Prevention of Medical Errors' 'When Things Go Wrong' into German 'Wenn etwas schief geht'. This has been widely distributed and has helped bring awareness to this issue in Switzerland. The Patient Safety Foundation also offers interactive and practical oriented workshops for practitioners concerning error communication; this has also been supported by University hospitals increasingly offering courses regarding error communication. The issue of error disclosure in Switzerland has also been recently pushed forward by the Institute of Communication and Health at the University of Lugano (<http://www.ich.com.usi.ch/>), founded in 2007.

The Swiss Academy of Medical Sciences (SAMW) has not issued any guidelines specifically on error communication, but supports educational efforts in relation to the issue. For instance, in its recommendations 'Aus- und Weiterbildung in Patientensicherheit und Fehlerkultur' the SAMW specifically state that practitioners must openly debate medical errors and obtain the skills required for communicating errors with patients and peers.[18] The SAMW's guidelines on medical ethics also state practitioners should be honest and transparent.[19]

Quality improvement efforts have also found their way into federal law with the recent revision of the health insurance law (KVG-Revision 2007) and the introduction of the DRG-

system on 1 January 2012. The so called transparency regulations in Article 49(8) of the KVG require hospitals to not only specify medical costs, but also to publish data on certain quality criteria.[20] Quality measure include infection rates associated with certain interventions, potentially preventable reoperations and rehospitalisation, falls and pressure sores as well as patient surveys performed by the National Association for Quality Development in Hospitals and Clinics (ANQ). In many cantons, the hospitals which are on the cantonal hospital list are obliged under their contracts to perform these ANQ measurements.

Internal hospital standards on error communication are not yet part of the federal quality improvement efforts in Switzerland. In a number of countries, however, they are part of an accreditation requirement for hospitals. For instance, in the US through the Joint Commission of the Accreditation of Hospitals (JCAHO). As Swiss hospitals are under no such obligation, no data is available on how many Swiss hospitals currently have implemented an internal error communication standard. Given that a lack of institutional support can be a significant barrier to error communication, and that organizational standards have been shown internationally to be an important factor in encouraging error disclosure, this study seeks to establish what stage Swiss hospitals are currently at in implementing an internal standard concerning error communication. This overview will contribute to our understanding of error communication in Switzerland and will assist efforts to advance the issue of error disclosure.

### **3.2. Methods**

To get an overview of the implementation status of error disclosure standards, a short survey was sent to Swiss hospitals asking the hospitals' implementation status of an internal standard that provides patients or their relatives are to be promptly informed about medical errors that result in harm. To assess the maturity of disclosure policies at Swiss hospitals, three different



stages were defined. In stage 1, hospitals have not yet examined the possibility of disclosure policies or do not have plans to implement one, in stage 2, implementation has been examined and is planned in the next 12 months, and in stage 3 a policy has already been implemented (adapted from Briner et al [21]). Thus, the survey question asked “Does there exist an internal hospital standard which provides that patients or their relatives are to be promptly informed about medical errors that result in harm.” offering the the following answering options: “yes; no; implementation planned within the next 12 months”. This was a slightly modified version of a question included the University of Bonn’s Institute for Patient Safety 2010 national survey concerning the implementation status of clinical risk management in German hospitals.[9] The question used in Germany had in addition: “Does there exist an internal hospital standard which provides that patients or their relatives are to be promptly informed about medical errors that result in harm and receive an offer of support.” The survey also required the specification of hospital type according to the following categories: University hospital, Acute Care hospital, Psychiatric clinic, Rehabilitation clinic, and Specialty clinic.

Hospitals were identified in August 2011 via the Swiss Hospital Association’s website ([www.hplus.ch/](http://www.hplus.ch/)) where hospital members are listed by cantons. There were 383 listings in total. After deleting one invalid address and duplicates (3), 379 valid addresses were included. The anonymous questionnaire was sent to hospitals in German, French or Italian, depending on the language used in the hospital. The questionnaires were translated by native speakers. The questionnaire was addressed to the hospital director and included a postage paid return envelope. The majority of hospitals were located in the German-speaking part of Switzerland (273), 84 were located in the French-speaking part and 22 were located in the Italian-speaking part.

Results from returned questionnaires were entered into and analysed with SPSS v20. Data was compared using chi-square statistics. For the comparison between hospital types, hospitals who indicated more than one or no type were excluded (n = 22). For the contrast regarding differences between hospital types, two groups were built: University and Acute Care hospitals versus all others (Psychiatric, Rehabilitation, and Specialty Clinics).

### **3.3. Results**

Responses were received from a total of 205 hospitals, translating into a response rate of 54%. Almost half (46%) of the responding Swiss hospitals reported an implemented error disclosure standard. While 16% of the hospitals reported that they are planning to implement one in the next 12 months. Thus, 62% of all Swiss hospitals were using an error disclosure standard or were planning a timely implementation at the time of the survey. More than a third (38%) had not implemented an error disclosure standard and were not planning to do so.

When split into language region, significant differences existed between the German speaking and Latin (French and Italian speaking) regions (see Table 1). While in all regions the largest group were hospitals which had reported the implementation of an error disclosure standard (German 48%, Latin 42%), hospitals in the different language regions varied concerning the answers “no implementation” versus “planned implementation in the next 12 months”. A total of 41% of German speaking, compared to 30% of hospitals from Latin regions answered no, while the percentage of hospitals that reported to plan implementation in the next 12 months was higher in the Latin region (28%) than in the German speaking region (11%);  $\chi^2 (2, N = 205) = 9.7, p = 0.008$ .

The results were also analysed according to hospital type (Table 2). There was a significant association between hospital type and the implementation of an error disclosure standard or planned implementation of a standard within the next 12 months. Most University and Acute Care (75%) hospitals that returned the survey had introduced an error disclosure standard or were planning to do so in the next 12 months. In contrast, Psychiatric, Rehabilitation and Specialty clinics had significantly more often no error disclosure standard (53%) than University and Acute Care hospitals (25%);  $\chi^2 (1, N = 183) = 15.55, p < 0.001$ .

The results were also compared to the results of a similar survey conducted in Germany by the University of Bonn's Institute for Patient Safety in 2010 (Table 3). While the Swiss survey only asked about the implementation status of an error disclosure standard requiring to promptly inform patients and their relatives about medical errors that result in harm, the German survey question also asked whether they also receive an offer of support. The response rate of German survey was lower (26%) than the Swiss survey (54%). The comparison shows that while a majority of responding Swiss hospitals (62%) have implemented an error disclosure standard or planned to, only 43% of responding German hospitals had implemented or were planning to.

Due to rounding, total percentages in all tables can exceed or fall below 100%.

Table 1. Swiss Hospital Survey Results by Language Type\*

Hospital language	N (%)		
	Yes	Planned	No
205 (100)†	94 (46)	33 (16)	78 (38)
German	69 (48)	16 (11)	60 (41)
145 (71)			
Latin: French/Italian	25 (42)	17 (28)	18 (30)
60 (29)			

\* Hospitals were asked regarding the implementation status of an internal hospital standard that provides patients or their relatives are to be promptly informed about medical errors that result in harm.† The survey was sent to a total of 379 hospitals. 205 responses were received (54% response rate).

Table 2. Swiss Hospital Survey Results by Hospital Type\*

Hospital type	N (%)		
	Yes	Planned	No‡
183 (100)†	83 (45)	30 (16)	70 (38)
University & Acute Care 94 (52)	53 (56)	18(19)	23 (25)
Psychiatric, Rehabilitation, & Specialty 89 (48)	30 (34)	12 (14)	47 (53)

\*Hospitals were asked regarding the implementation status of an internal hospital standard that provides patients or their relatives are to be promptly informed about medical errors that result in harm.

†The survey was sent to a total of 379 hospitals. 205 responses were received. Hospitals who indicated more than one or no type were excluded (n = 22).

‡No implementation vs. implementation or planned implementation:  $\chi^2 (1, N = 183) = 15.55$ ,  $p < 0.001$  (University and acute care hospitals vs. all other hospitals).

Table 3. Comparison of Switzerland and Germany Survey Results\*

N (%)			
	Yes	Planned	No
Switzerland	94 (46)	33 (16)	78 (38)
	205 (100)		
Germany	103 (22)	100 (21)	273 (57)
	476 (100)		

\*Comparison of the overall results of the hospital survey conducted in Germany in 2010 by the University of Bonn’s Institute for Patient Safety. The question used in Germany had in addition to the question used in Switzerland: “Does there exist an internal hospital standard which provides that patients or their relatives are to be promptly informed about medical errors that result in harm *and receive an offer of support.*” The Swiss survey achieved a 54% response rate (205/379), while the German survey achieved a 26% response rate (476/1820).

### **3.4. Discussion**

It appears that Swiss hospitals are in a promising state in providing institutional support for practitioners disclosing medical errors to patients as the majority of hospitals already have standards regarding medical error disclosure or are intending to implement one in the near future. Several explanations may exist why hospitals from German speaking regions reported significantly more often no implementation than hospitals from Latin regions. Instead of answering “no” a higher percentage of the latter than the former indicated they planned implementation within the next 12 months. The results could indicate that hospitals from the German speaking regions are more adamant not to implement standards than Latin hospitals or, alternatively, be influenced by a culturally varying interpretation of the certainty with which the implementation had to be planned within the next 12 months.

Certain types of hospitals in Switzerland seem to be somewhat less advanced in dealing with this issue. In particular, Psychiatric and Rehabilitation clinics appear to be less likely to have error disclosure standards than University and Acute Care hospitals. The differences among hospital types in Switzerland may reflect the variable visibility of patients asking for investigation of suspected errors. Indeed, the number of requested FMH expert evaluations varied according to medical disciplines.[23] Our results may also reflect differences in both the type of care provided and the amount of attention medical errors have received in these settings in the media and in the international literature. Since the Institute of Medicine’s landmark report ‘To err is human’ was published in 2000,[17] important research has been conducted on the nature, impact and causes of medical errors.[24-29] However, the majority of research has been conducted in hospitals settings and have consistently excluded patients with mental disorders.[30] Indeed, psychiatry has had a “late arrival on the medical error scene” and very little empirical research has been conducted regarding medical errors in this

field, possibly due to psychiatric practice being intensely private, psychiatric patient characteristics and psychiatry not involving the types of invasive procedures that have gained so much attention in the media when they go wrong.[30] We are also not aware of any study that has examined medical errors in rehabilitation clinics. Consequently, further research is needed to explore the unique aspects of psychiatric and rehabilitation clinics regarding medical errors and the reasons why these hospitals do not have error disclosure standards.

Further research is also needed to explore how the disclosure standards are actually implemented in Swiss hospitals and whether hospital staff adhere to the established standard. In the U.S. for instance, where patient safety standards from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) have required hospitals to disclose to patients all unexpected outcomes of care since 1 July 2001,[31] a 2005 study of hospital CEOs found that 85% had a written policy that recommended disclosure of unanticipated outcomes to patients [32]. However, although most hospitals have a disclosure standard, a 2006 national survey of risk managers in the U.S. found that risk managers estimated that 25 percent of serious errors are not disclosed to patients, and for minor errors 38 percent disagreed that they are disclosed effectively.[33]

In 2007/2008 and in 2010 Swiss hospitals were asked to take part in a voluntary national survey intended to assess the maturity of hospital's implementation of critical risk management (CRM) strategies.[34] While the survey contained a section on "Communication and information", which included the question "There are guidelines to ensure that patients are openly and pro-actively informed of critical incidents or errors that occurred during their treatment.", the communication of errors has not been a focus of any of the resulting articles nor have the results of this particular question been published. In contrast, all of the results of



the study conducted in Germany in 2010 have been published.[22] When comparing the error disclosure standards results of our 2011 survey to the study conducted in Germany in 2010, we observed that a higher percentage of Swiss hospitals had introduced or planned to introduce error disclosure standards. However, whether the observed differences in percentages between the results of this study and the study conducted in Germany are statistically meaningful and reflect real differences in the prevalence of hospital error disclosure standards in the two countries, or are due to differences in the wording the question, is unclear. While the process of error disclosure consists of more than just the provision of information, it was felt that the formation used in the German survey combined two distinct elements that should be separated, as some hospitals may offer one element but not the other. What constitutes 'support' is also rather ambiguous. Therefore, it was decided to drop the second part of the question used in Germany to keep the questionnaire simply and clear. Given the question used in Germany combined two different elements, error disclosure and an offer of support, it might be expected that the Swiss results would be higher compared to the German results as the question used only included the first element.

Information on error communication with patients is not yet part of the transparency regulation in Switzerland although we believe it should be regarded as an equally important part of patient safety improvement efforts. Whether errors have been communicated to patients is an important quality indicator of medical outcomes and thus should be introduced into the quality measure of the ANQ as part of the patient surveys. Publicly available information of the frequency of disclosure to patients may provide hospitals with an advantage in the new regulatory environment. The introduction of free Swiss wide treatment for patients with basic health care in 2012 in combination with the new ANQ-measurements will in the future most likely lead to patients evaluating different hospitals before choosing

where to undergo treatment. Communication about safety and disclosure practices in a certain hospital could be a valuable decision criterion.

Patients come to hospital specifically for help in staying or getting well and trust that the health care setting is one in which their health and well-being will be promoted, not be endangered by the very people that they trust to help them. For those affected, a harm causing error can be a violation of trust and can cause a loss of confidence in health professionals and hospitals. This situation is exacerbated when errors are not acknowledged or are intentionally concealed, or when only partial or ‘edited’ explanations are provided.[35] Patients want to be informed of any medical error immediately and have full disclosure of the error’s extent.[36] Studies have also found that disclosure of adverse events to patients, even when patients had suffered harm, doubled the odds for allocating high ratings regarding the quality of care received.[37]

Furthermore, there is an ethical responsibility to maintain honest communication with patients and their families, even when things go wrong.[3] Truth telling is central to the healthcare relationship, where evident and ineradicable imbalances of power, knowledge, and vulnerability are found. The provision of full and accurate information not only allows patients to make informed choices about their healthcare and other aspects of their lives, but is also important in establishing, maintaining and restoring trust in the healthcare relationship; this is particularly important after a harm causing error.[35]

The finding that a majority of hospitals was aware of the issue of communicating medical errors and had already taken active steps to establish a culture of dealing with them is promising. Furthermore, the implementation of standards across cultures and languages in

Switzerland, a country with an emphasis on decentralisation, shows that changes in the medical system towards more transparency and open communication with patients are being recognised as universally needed. However, Swiss hospitals need to take further actions regarding this issue. The fact that more than one third of the hospitals reported not having an internal standard should be examined further in order to find explanations and identify obstacles that keep those institutions from implementing one.

While error disclosure is a complex issue requiring a number of different measures to change practice, the implementation of error disclosure standards has been shown internationally to be one important factor in encouraging the disclosure of medical errors. Such standards are, of course, no panacea; there remains a challenge of translating statements of principle into practice. However, such measures can play an important role in influencing professional, national and organisational cultures, which have a significant effect on the practice, values and individual attitudes in a workplace. While these cultures are dynamic, they also have considerable inertia which requires both strong interventions and time to change.[38] External pressure from regulation, such as the addition of error disclosure frequencies to the ANQ-measurements, could provide the necessary force to induce the required change of practice. However, as international examples also show, other factors such as the training of staff also need to be considered.

Less than 50% of respondents reported having an internal standard concerning error disclosure. As respondents are likely to be those more interested in the topic, this fact should be taken seriously. Since results are self-reported, the over-reporting of socially desirable activities can also not be excluded. Thus it is possible that the percentage of hospitals without

error disclosure policy is even higher than indicated. Both limitations point in the same direction and underline the importance of our findings in Switzerland.

The study has some limitations. We can only refer to answers reported by hospitals. Perceived social desirability of answers might have caused a bias towards over-reporting of implementation of planned implementation. Since the questionnaire was anonymous, hospitals would not fear to be tracked down and asked to actually prove the existence of their standards. However, we believe that the answers “no implementation” should be taken seriously because they are likely to indicate honest reporting that error disclosure standards are neither existing nor planned within the foreseeable future of the next 12 months. It is also noteworthy that this bias is not likely to affect the comparison between Germany and Switzerland, because results in both countries rely on self-reporting and would be subject to a similar reporting bias.

With the response rate being less than 60% (205/379 – 54%) a generalization of the results for all hospitals in Switzerland is not possible. However, it could be argued that this study’s response rate was above average. A study in 2008 which analysed 1607 studies published in the years 2000 and 2005 in 17 refereed academic journals found that the average response rate for studies that utilized data collected from organizations was 35.7 percent.[39] Furthermore, we do not know what hospital error disclosure standards look like in detail and if they are comparable between hospitals. We received 11 questionnaires where more than one hospital type was indicated. While in some cases overlap in the categories was evident (a university psychiatric hospital or university acute hospital), we cannot exclude that in other cases one answers was sent that referred in fact to more than one hospital. One of the 11 responses provided contact details and we were able to find out that in this case the questionnaire was

filled out for 7 hospitals of 3 different types. However, we do not have reasons to believe that this type of filling out the questionnaires was of significant frequency to have caused a bias. First of all, we have contacted single hospitals so that it seems unlikely that many should have felt inclined to answer for more than their own hospital. Moreover, the large majority of respondents indicated one single hospital type and results do not change if we include all 205 or only the 183 hospitals that indicated a single hospital type. Indeed, if in a few questionnaires the answers might refer to more than one hospital this is likely to have occurred independently of different language regions and independently of implementation of error disclosure standards. On the contrary, this indicated that we might have slightly underestimated the number of hospitals that responded and therefore our study might even extend to a slightly higher number of responding hospitals than the calculated 54% response rate.

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# **CHAPTER 4: DISCLOSING AND REPORTING MEDICAL ERRORS: CROSS-SECTIONAL SURVEY OF SWISS ANAESTHESIOLOGISTS**

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## **Abstract**

**Context:** There has been limited research on anaesthesiologists' attitudes and experiences regarding medical errors communication, particularly concerning disclosing errors to patients. The current shortage of information presents an obstacle to efforts to increase open communication following anaesthetic errors.

**Objective:** To characterise anaesthesiologists' attitudes and experiences regarding communicating medical errors with the hospital and to patients, and to examine factors influencing their willingness to communicate errors.

**Design:** Cross-sectional survey.

**Setting and Participants:** Clinically active anaesthesiologists working in Switzerland's 5 university hospitals' departments of anaesthesia in 2012/2013.

**Main Outcome Measures:** Anaesthesiologists' attitudes and experiences regarding medical error communication.

**Results:** Significant differences in attitudes between departments regarding error communication were found. Overall, 97% of respondents agreed that serious errors should be reported to the hospital, but willingness to report minor errors (74%) and near misses (59%) was lower. Respondents were more likely to strongly agree that serious errors should be reported if they also thought that their hospital implements systematic changes after errors were reported (OR, 2.097 [95% CI, 1.16-3.81]). Respondents also widely endorsed disclosing harmful errors to patients (100% serious, 77% minor errors, 19% near misses), but reported factors that might make them less likely to actually disclose. Only 12% of respondents had previously received training on how to disclose errors to patients, although 93% were interested in receiving training.

**Conclusion:** Willingness to disclose or report errors varied strongly between hospitals. Heads of department and hospital chiefs thus need to be aware of how important local culture seems

to be when it comes to error communication. Improving feedback on how error reports are being used to improve patient safety and increasing error disclosure training may also be important steps in increasing anaesthesiologists' communication of errors.

#### **4.1. Introduction**

At the core of the patient safety movement is the open communication about medical errors. With research highlighting how many errors have their roots in systematic failures,[1] it is seen as important that errors are reported so that opportunities for system improvements can be identified and addressed.[2] Disclosing errors to patients is also widely seen as an ethical, professional and legal duty internationally.[3-7] However, there remains a large 'gap' between expected communication practice and what is actually being done, with research indicating that errors are often not reported within hospitals or disclosed to patients.[8-9] A number of barriers to open and honest communication about medical errors have been identified, however, the most pervasive barrier identified is professionals' legal fears.[10-11]

In Switzerland, patient safety has received greater attention ever since the Swiss Patient Safety Foundation was founded in 2003. In 2010, the second national monitoring for clinical risk management in Swiss hospitals found that 65% of responding hospitals had a central coordination for clinical risk management (although many with only minimal personal resources).[12] It was also found that while 71% of responding hospitals have a hospital-wide critical incident reporting system (14% had a non-anonymized system), 78% saw a need for standardization of critical incident reporting processes.[12] Indeed, while the University of Basel's Department of Anaesthesia set up one of the first critical incident reporting systems internationally in 1996,[13] implementation progress of reporting systems is mixed in Switzerland. For example, some hospitals operate many reporting systems at the department

level, while other have one hospital-wide system in place, most systems are voluntary and anonymous but some hospitals mandate the reporting of certain errors. The Swiss Patient Safety Foundation has established a network of local incident reporting systems where reports are merged in a central database. Regarding the disclosure of errors to patients, the Swiss Patient Safety Foundation translated the Massachusetts Coalition for the Prevention of Medical Errors' "When Things Go Wrong" into German ("Wenn etwas schief geht") in December 2006,[4] which has been widely distributed and has helped bring awareness to this issue in Switzerland. However, adaption has been slow. A recent study found that only 46% of the responding Swiss hospitals currently have an error disclosure policy.[14]

Although anaesthesiology has long been considered as "the leading medical specialty in addressing issues of patient safety",[15] there has been limited research on anaesthesiologists' attitudes and experiences regarding medical errors communication, particularly the disclosure of errors to patients.[16-20] This study therefore aims to characterise anaesthesiologists' attitudes and experiences regarding disclosing errors to patient and reporting errors within the hospital, and to examine factors influencing their willingness to communicate errors. We expect that attitudes towards error communication are connected to hospital culture and policies, and hence we will compare differences in attitudes and experiences between departments.

## **4.2. Methods**

The study was approved by Prof A Perruchoud, Chairperson of the Ethics Committee of Basel, on 6 January 2012. Informed consent was implied by returning the survey.

### *Survey Implementation*

This anonymous survey was conducted between July 2012 and April 2013. Surveys were not sent to departments at the same time due to logistic considerations and availability of departments. Surveys were mailed to a total of 542 clinically active anaesthesiologists working in Switzerland's five university hospitals' departments of anaesthesia: department A (n=77), department B (n=145), department C (n=115), department D (n=85) and department E (n=120). Participation was encouraged through repeated email reminders via the Chiefs of Departments.

### *Survey Contents*

The survey was a modified version of a survey conducted in the North American setting,[21] which was kindly provided by Thomas H. Gallagher from the University of Washington. The survey was translated into German and French and was pilot tested with a total of 11 medical doctors (five German speaking, six French speaking) to ensure clarity and item comprehension. Questions explored respondents' experiences and attitudes relating to medical errors, disclosing errors to patients and reporting errors within the hospital. Definitions for key terms (medical error, serious error, minor error, near miss) that have been well established in the literature, were provided at the beginning of the questionnaire.[21-22] Agreement was measured on a 4-point Likert scale (from "strongly disagree" to "strongly agree"). Demographic questions asked for respondents' age, sex, religion, level of training, position, and the percentage of time they spent in direct patients contact. The survey took approximately 10 minutes to complete.

### *Statistical Analysis*

Descriptive statistics included medians, means and standard deviations for continuous variables and percentages for categorical variables. Questions that used 4-point Likert

response scales were dichotomized at the midpoint (agree vs disagree) because sample sizes for some cells were often too small to be analysed. However, the question “serious errors should be disclosed to patients” was dichotomized at strongly agree vs all others because we expected that disclosure of serious errors would be endorsed by virtually all anaesthesiologists based on previous research.[21-22] To analyse characteristics of respondents, and attitudes and experiences regarding error communication, we used chi-squared tests for categorical data and t-tests for continuously distributed data. To assess predictors of strong agreement that serious errors should be reported to the hospital or disclosed to patients, we used logistic regression models. For each predictor we set up two models. The first model contained the respective predictor and department as sole covariate, whereas the second model was in addition adjusted for the following covariates: sex, age, years in practice, religion, and position. Since the results based on both models were always comparable for each model we only report those based on the first and more parsimonious model. Departments were always included in the model as they were considered an integrated part of the study design. Odds ratios reported are conditional, i.e. adjusted for the covariate(s) in the model. The test for significance of a predictive effect was based on the logarithm of the ratio between the likelihoods of the model containing the predictor and the covariate(s) and the model containing only the covariate(s). All analyses were performed with a significance level alpha set to 0.05 and two-tailed tests, using SPSS v21.

### **4.3. Results**

#### *Characteristics of Respondents*

Overall respondent characteristics are present in Table 1 (see also Table, Supplemental Digital Content 1, which presents characteristics by department).

### *General Experiences and Attitudes Regarding Medical Errors*

Nearly all of the anaesthesiologists reported having been involved in an error (98%) (see Table 2). Most anaesthesiologists (78%) agreed that medical errors are “one of the most serious problems in healthcare”. Overall, 59% of anaesthesiologists thought that it was somewhat likely or likely that they would receive a malpractice complaint within the next year, however, this also strongly depended on the department (see Table, Supplemental Digital Content 2, which presents general error experiences and attitudes by department).

### *Disclosing Errors to Patients*

Anaesthesiologists’ agreement that errors should be disclosed to patients increased with the error’s harm (see Table 3). However, agreement that serious errors and minor errors should be disclosed strongly varied among departments. Anaesthesiologists thought that disclosing a serious error to a patient would be very difficult (63%), would damage a patient’s trust in their competence (28%), and would make it less likely that a patient would sue them (71%), but all three percentages varied among departments. While anaesthesiologists agreed that serious errors should be disclosed to patients, many reported certain factors might make them less likely to actually disclose (see Table, Supplemental Digital Content 3, which presents respondents’ attitudes to error disclosure by department).

Of all the anaesthesiologists, only a third (34%) reported having previously disclosed a serious error to a patient, while 75% reported having previously disclosed a minor error to a patient. Of those who had disclosed an error, most reported being satisfied with the conversation, that the conversation had no change or a positive impact on their relationship with the patient, and that they experienced relief after. A minority of anaesthesiologists (12%) had received any training on how to disclose errors to patients. However, almost all (93%)



respondents were either somewhat or very interested in receiving general training on how to disclose errors to patients, and (95%) either somewhat or very interested in receiving support from an expert on patient communication after a serious error (see Table, Supplemental Digital Content 4, which presents respondents' experiences with error disclosure by department).

Only two factors were found to independently predict strong agreement that serious errors should be disclosed to patients. First, anaesthesiologists who had been personally involved in a serious error were less likely to strongly agree. Second, anaesthesiologists who had experienced relief after disclosing their last serious error were more likely to strongly agree compared to those who had not experienced relief or who had never disclosed a serious error before (see Table, Supplemental Digital Content 5, which presents all factors tested).

#### *Reporting Errors within the Hospital*

Anaesthesiologists' agreement that they should report errors to their hospital increased with the error's harm (see Table 4). However, agreement that near misses and minor errors should be reported strongly varied among departments. The majority of all anaesthesiologists (93%) knew that their hospital has an error reporting system to improve patient safety. Of those who knew that there was an error reporting system, most had reported an error, and most also agreed that system changes to improve patient safety occur after errors are reported at their hospital. However, only 63% of all anaesthesiologists agreed that current systems for doctors to report errors are adequate. All these percentages strongly varied among departments except for the reporting of serious errors (see Table, Supplemental Digital Content 6, which presents respondents' attitudes and experiences with error reporting by department).

Three factors were found to independently predict strong agreement that serious errors should be reported to the hospital: anaesthesiologists were more likely to strongly agree that serious errors should be reported if they also thought that near misses should be reported to improve patient safety, if they thought that their hospital implements systematic changes to improve patient safety after errors are reported, and if they thought that current systems for reporting errors are adequate (see Table, Supplemental Digital Content 7, which presents all factors tested).

Table 1. Characteristics of the Respondents

Characteristic	Total	Statistics <sup>a</sup>
	N=281	
	(%)	
Response rate <sup>b</sup>	52%	$\chi^2(4)=33.4, p<.001$
Age <sup>c</sup>	38.4 (8.62)	$F(4, 274) = 3.49, p=.008$
Sex		$\chi^2(4)=9.69, p=.046$
Male	158 (56)	
Female	123 (44)	
Years in practice <sup>d</sup>	11.7 (8.89), 9.0	$F(4,274)=5.07, p<.001$
Position <sup>e</sup>		$\chi^2(12)=84.9, p<.001$
Chief	12 (4)	
Senior	100 (36)	
Chief Resident	35 (13)	
Assistant	134 (48)	
%Time in direct patient contact <sup>e f</sup>		$\chi^2(8)=8.77, p=.36$
0	1 (<1)	
1-25	2 (1)	
26-50	20 (7)	
51-75	76 (27)	
76-100	182 (65)	

<sup>a</sup> Statistics report the differences between the five departments.

<sup>b</sup> Response rate is based on 281 respondents of 542 total possible.

<sup>c</sup> Data is given as mean (SD).

<sup>d</sup> Data is given as mean (SD), and median.

<sup>e</sup> Due to rounding, total percentages can exceed or fall below 100%.

<sup>f</sup> For the test, groups 1–3 were combined due to small cell sizes.

Table 2. General Experience and Attitudes Regarding Medical Errors

Statement	Total	Statistics <sup>a</sup>
	N=281	
	(%)	
Error involvement: <sup>b</sup>		
Serious Error	116 (41)	$\chi^2(4)=8.97, p=.062$
Minor Error	220 (78)	$\chi^2(4)=3.00, p=.555$
Near Miss	240 (85)	$\chi^2(4)=3.55, p=.471$
None <sup>c</sup>	5 (1.8)	
Medical errors are a serious problem	219 (78)	$\chi^2(4)=3.91, p=.418$
Medical errors are usually caused by system failures <sup>d e</sup>	160 (57)	$\chi^2(4)=31.1, p<.001$
Likely to receive a malpractice complaint within the next year <sup>f</sup>	166 (59)	$\chi^2(4)=24.1, p<.001$

<sup>a</sup> Statistics report the differences between the five departments.

<sup>b</sup> Data are given as proportion of each group that responded “yes” to the statement.

<sup>c</sup> Cell sizes too small to be analysed

<sup>d</sup> Data are given as proportion of each group that agrees with the statement. “Agree” includes those who agree plus those who strongly agree. <sup>e</sup>

<sup>f</sup> Data are given as proportion of each group that it was somewhat likely or likely that they will receive a malpractice complaint within the next year.

Table 3. Disclosing Errors Disclosure to Patients

Statement	Total	Statistics <sup>a</sup>
	N=281	
	(%) <sup>b</sup>	
Patients should be informed		
about:		
Serious Errors <sup>c</sup>	228 (81)	$\chi^2(4)=24.3, p<.001$
Minor Errors <sup>d</sup>	215(77)	$\chi^2(4)=34.8, p<.001$
Near Misses <sup>d</sup>	53 (19)	$\chi^2(4)=2.28, p=.684$
Disclosing a serious error		
would: <sup>d</sup>		
Be very difficult	175(63)	$\chi^2(4)=14.1, p=.007$
Damage patient's trust in my competence	79 (28)	$\chi^2(4)=12.8, p=.012$
Make it less likely that a patient would sue me	197(71)	$\chi^2(4)=17.1, p=.002$
Previous disclosure training <sup>e</sup>	33 (12)	$\chi^2(4)=10.6 p=.031$
Interest in receiving		
disclosure training <sup>f</sup>		
Not at all interested	18 (6)	
Somewhat interested	144(51)	
Very interested	118(42)	

<sup>a</sup> Statistics report the differences between the five departments.

<sup>b</sup> Due to missing data, total responses range from 281 to 277. Missing data for a department did not exceed 2 responses for any question.

<sup>c</sup> Data are given as proportion of each group that strongly agrees with the statement. 100% of respondents either agreed or strongly agreed with the statement.

<sup>d</sup> Data are given as proportion of each group that agrees with the statement. “Agree” includes those who agree plus those who strongly agree.

<sup>e</sup> Data are given as proportion of each group that responded “yes” to the statement.

<sup>f</sup> Due to rounding, total percentages can exceed or fall below 100%. Cell sizes were too small to be analysed.

Table 4. Reporting Errors within the Hospital

Statement	Total	Statistics <sup>a</sup>
N=281 (%) <sup>b</sup>		
Doctors should report to their hospital: <sup>c</sup>		
Serious errors <sup>d</sup>	269 (97)	
Minor Errors	206 (74)	$\chi^2(4)=40.7, p<.001$
Near Misses	163 (59)	$\chi^2(4)=31.5, p<.001$
My hospital has an error reporting system (Yes) <sup>d e</sup>		
Errors personally reported <sup>f</sup>		
Serious Error	82 (32)	$\chi^2(4)=6.00, p=.200$
Minor Error	147 (57)	$\chi^2(4)=14.7, p=.005$
Near Misses	166 (65)	$\chi^2(4)=33.2, p<.001$
None	45 (18)	$\chi^2(4)=22.0, p<.001$
System changes occur in hospital after errors are reported <sup>c f</sup>	189 (74)	$\chi^2(4)=15.7, p=.002$
Current reporting systems are adequate. <sup>c</sup>	173 (63)	$\chi^2(4)=15.7, p=.003$



<sup>a</sup> Statistics report the differences between the five departments.

<sup>b</sup> Due to missing data, total responses range from 281 to 276. Missing data for a department did not exceed 2 responses for any question.

<sup>c</sup> Data are given as proportion of each group that agrees with the statement. “Agree” includes those who agree plus those who strongly agree.

<sup>d</sup> Cell sizes were too small to be analysed.<sup>e</sup> Data are given as proportion of each group that responded “yes” to the statement.<sup>f</sup> Data are given as proportion of each group that responded “yes” to the statement “Does your hospital have an error reporting system to improve patient safety?” Due to missing data, sample size was 257.

Supplemental Digital Content 1. Characteristics of the Respondents by Department

Characteristic	Total	Departments					Statistics
		A	B	C	D	E	
	N=281	n=61	n=56	n=58	n=45	n=61	
	(%)	(%)	(%)	(%)	(%)	(%)	
Response rate <sup>a</sup>	52%	79%	39%	50%	53%	51%	$\chi^2(4)=33.4,$ p<.001
Age <sup>b</sup>	38.4	37.3	35.9	39.2	38.1	41.4	F(4, 274) = 3.49, p=.008
	(8.62)	(9.39)	(5.97)	(8.09)	(7.90)	(10.10)	
Sex							$\chi^2(4)=9.69,$ p=.046
Male	158	26	32	41	26	33	
	(56)	(43)	(57)	(71)	(58)	(54)	
Female	123	35	24	17	19	28	
	(44)	(57)	(43)	(29)	(42)	(46)	
Years in practice <sup>c</sup>	11.7	10.7	8.5	11.8	11.7	15.5	F(4,274)=5.07, p<.001
	(8.89),	(10.45),	(5.91),	(7.93),	(7.37),	(10.11),	
	9.0	6.0	7.0	10.5	9.0	12.0	
Position <sup>d</sup>							$\chi^2(12)=84.9,$ p<.001
Chief	12 (4)	6 (10)	2 (4)	2 (3)	1 (2)	1 (2)	
Senior	100(36)	15 (25)	24(43)	31(53)	8 (18)	22 (36)	
Chief Resident	35 (13)	0 (0)	0 (0)	0 (0)	15(33)	20 (33)	
Assistant	134(48)	40 (66)	30(54)	25(43)	21(47)	18 (30)	
%Time in direct							$\chi^2(8)=8.77,$ p=.36

patient contact <sup>d e</sup>						
0	1 (<1)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
1-25	2 (1)	0 (0)	0 (0)	1 (2)	0 (0)	1 (2)
26-50	20 (7)	7 (12)	5 (9)	2 (3)	3 (7)	3 (5)
51-75	76 (27)	21 (34)	10(18)	19(33)	9 (20)	17 (28)
76-100	182(65)	33 (54)	40(71)	36(62)	33(73)	40 (66)

<sup>a</sup> For the total, the rate is based on 281 respondents of 542 total possible. For A, 61 respondents of 77 total possible. For B, 56 respondents of 145 total possible. For C, 58 respondents of 115 total possible. For D, 45 respondents of 85 total possible. For E, 61 of 120 total possible.

<sup>b</sup> Data are given as mean (SD).

<sup>c</sup> Data are given as mean (SD), and median

<sup>d</sup> Due to rounding, total percentages can exceed or fall below 100%.

<sup>e</sup> For the test, groups 1–3 were combined due to small cell sizes.

Supplemental Digital Content 2. General Experience and Attitudes Regarding Medical Errors

Statement	Total	Departments					Statistics
	N=281	A	B	C	D	E	
	(%)	n=61	n=56	n=58	n=45	n=61	
		(%)	(%)	(%)	(%)	(%)	
Error involvement: <sup>a</sup>							
Serious Error	116(41)	17(28)	27(48)	28(48)	15(33)	29 (48)	$\chi^2(4)=8.97, p=.062$
Minor Error	220(78)	43(71)	44(79)	47(81)	37(82)	49 (80)	$\chi^2(4)=3.00, p=.555$
Near Miss	240(85)	56(92)	45(80)	50(86)	37(82)	52 (85)	$\chi^2(4)=3.55, p=.471$
None <sup>b</sup>	5 (1.8)	1 (1.6)	1 (1.8)	1 (1.7)	1 (2.2)	1 (1.6)	
Medical errors are a serious problem <sup>c</sup>	219 (78)	52 (85)	40 (71)	46 (79)	33 (73)	48 (79)	$\chi^2(4)=3.91, p=.418$
Medical errors are usually caused by system failures <sup>c</sup>	160 (57)	50 (82)	18 (33)	32 (55)	21 (47)	39 (64)	$\chi^2(4)=31.1, p<.001$
Likely to receive a malpractice complaint within the next year <sup>e</sup>	166 (59)	48 (79)	22 (39)	28 (48)	31 (69)	37(61%)	$\chi^2(4)=24.1, p<.001$

<sup>a</sup> Data are given as proportion of each group that responded “yes” to the statement.

<sup>b</sup> Cell sizes too small to be analysed

<sup>c</sup>Data are given as proportion of each group that agrees with the statement. “Agree” includes those who agree plus those who strongly agree. <sup>d</sup>

<sup>e</sup> Data are given as proportion of each group that it was somewhat likely or likely that they will receive a malpractice complaint within the next year.

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Supplemental Digital Content 3. Attitudes to Disclosing Errors to Patients

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Statement	Total	Departments					Statistics
	N=281	A	B	C	D	E	
	(%) <sup>a</sup>	n=61	n=56	n=58	n=45	n=61	
		(%)	(%)	(%)	(%)	(%)	
<hr/>							
Patients should be informed about:							
Serious Errors <sup>b</sup>	228(81)	37(61)	48(86)	54(93)	36(80)	53(87)	$\chi^2(4)=24.3, p<.001$
Minor Errors <sup>c</sup>	215(77)	30(49)	46(82)	53(91)	37(82)	49(80)	$\chi^2(4)=34.8, p<.001$
Near Misses <sup>c</sup>	53 (19)	8 (13)	13(23)	11(19)	8 (18)	13(21)	$\chi^2(4)=2.28, p=.684$
<hr/>							
Disclosing a serious error would: <sup>c</sup>							
Be very difficult	175(63)	47(77)	34(62)	40(69)	19(43)	35(58)	$\chi^2(4)=14.1, p=.007$
Damage patient's trust in competence	79 (28)	25(41)	20(36)	14(24)	6 (13)	14(23)	$\chi^2(4)=12.8, p=.012$
Make it less likely that a patient would sue me	197(71)	32(53)	37(67)	45(79)	38(84)	45(76)	$\chi^2(4)=17.1, p=.002$
<hr/>							
Factors which might make you less likely to disclose a serious error <sup>d</sup>							

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If patient is unaware of error	25 (9)	3 (5)	6 (11)	5 (9)	3 (7)	8 (13)	$\chi^2(4)=3.04, p=.551$
If I think patient wouldn't want to know	68 (24)	8 (13)	15(27)	18(31)	14(31)	13(21)	$\chi^2(4)=7.22, p=.125$
If I think patient would become angry with me <sup>e</sup>	10 (4)	2 (3)	3 (5)	3 (5)	0 (0)	2 (3)	
If I don't know the patient well. <sup>e</sup>	8 (3)	1 (2)	2 (4)	2 (3)	1 (2)	2 (3)	
If I think I might get sued	41 (15)	12(20)	11(20)	10(17)	2 (4)	6 (10)	$\chi^2(4)=7.56 p=.109$
If I think the patient wouldn't understand what I was telling them	121(43)	14(23)	26(46)	34(59)	23(51)	24(39)	$\chi^2(4)=17.6 p=.001$

<sup>a</sup> Due to missing data, total responses range from 281 to 277. Missing data for a department did not exceed 2 responses for any question.

<sup>b</sup> Data are given as proportion of each group that strongly agrees with the statement. 100% of respondents either agreed or strongly agreed with the statement.

<sup>c</sup> Data are given as proportion of each group that agrees with the statement. "Agree" includes those who agree plus those who strongly agree.

<sup>d</sup> Data are given as proportion of each group that responded "yes" to the statement.

<sup>e</sup> Cell sizes were too small to be analysed.

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Supplemental Digital Content 4. Experiences with Disclosing Errors to Patients

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Statement	Total	Department					Statistics
		A	B	C	D	E	
	N=281						
	(%) <sup>a</sup>	n=61	n=56	n=58	n=45	n=61	
		(%)	(%)	(%)	(%)	(%)	
Previously disclosed serious error <sup>b</sup>	94(34)	15(25)	23(41)	20(35)	15(33)	21(34)	$\chi^2(4)=3.67$ p=.453
Satisfied with disclosure (somewhat or very satisfied) <sup>c</sup>	74(80)	10(67)	19(83)	17(85)	14(93)	14(70)	
Impact on relationship with patient? (% no change, somewhat or very positive) <sup>c</sup>	83(88)	13(87)	19(83)	19(95)	15(100)	17(81)	
Experienced relief after disclosure (% agree and strongly agree) <sup>c</sup>	77(83)	12(80)	17(74)	18(90)	13(87)	17(85)	

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Previously disclosed minor error <sup>b</sup>	211(75)	36(59)	38 (68)	51(88)	40 (89)	46(75)	$\chi^2(4)=19.7$ p<.001
Satisfied with disclosure (% somewhat or very satisfied) <sup>d</sup>	183(87)	30(83)	34 (90)	45(88)	38 (95)	36(80)	
Impact on relationship with patient? (% no change, somewhat or very positive) <sup>d</sup>	196(92)	29(81)	38(100)	48(94)	39 (98)	42(91)	
Experienced relief after disclosure (% agree and strongly agree) <sup>d</sup>	184(88)	32(89)	36 (95)	46(90)	32 (80)	38(86)	

Previous disclosure training <sup>b</sup>	33 (12)	14(23)	6 (11)	6 (10)	2 (4)	5 (8)	$\chi^2(4)=10.6$ p=.031
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Interest	in							
receiving								
disclosure								
training <sup>e</sup>								
Not at all	18 (6)	10(16)	0 (0)	3 (5)	3 (7)	2 (3)		
interested								
Somewhat	144(51)	42(69)	26 (46)	28(48)	28 (62)	20(33)		
interested								
Very	118(42)	9 (15)	30 (54)	27(47)	14 (31)	38(63)		
interested								

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Interest	in							
communication								
expert support								
after serious								
error <sup>e</sup>								
Not at all	10 (4)	1 (2)	2 (4)	4 (7)	1 (2)	2 (3)		
interested								
Somewhat	67 (24)	14(23)	13 (23)	8 (14)	20 (44)	12(20)		
interested								
Very	199(71)	45(74)	41 (73)	44(77)	24 (53)	45(74)		
interested								
Already	4 (1)	1 (2)	0 (0)	1 (2)	0 (0)	2 (3)		
receive								

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<sup>a</sup> Due to missing data, total responses range from 281 to 279. Missing data for a department did not exceed 2 responses for any question.

<sup>b</sup> Data are given as proportion of each group that responded “yes” to the statement.

<sup>c</sup> Data are given as proportion of each group that responded “yes” to the statement “Have you ever disclosed a serious error to a patient?” Cell sizes were too small to be analysed.

<sup>d</sup> Data are given as proportion of each group that responded “yes” to the statement “Have you ever disclosed a minor error to a patient?” Cell sizes were too small to be analysed.

<sup>e</sup> Due to rounding, total percentages can exceed or fall below 100%. Cell sizes were too small to be analysed.

Supplemental Digital Content 5. Factors Associated with Strong Agreement That Serious Errors Should Be Disclosed to Patients

Variable	OR (95% CI)	p-value
<b>Demographic characteristics</b>		
Years in practice	0.984 (0.591-1.019)	.370
>75% of time in direct patient contact	1.00 (.519–1.937)	.993
Age	0.994 (0.958-1.030)	.729
Sex	0.984 (0.521-1.858)	.960
Language (German vs French)	1.356 (0.718-2.559)	.342
Religion <sup>a</sup>		.235
<b>Attitudes about malpractice</b>		
Somewhat likely or likely that they would receive a malpractice complaint within the next year (vs somewhat or very unlikely)	0.690 (0.342-1.390)	.294
Disclosing a serious error would make it less likely that a patient would sue me (agree)	1.589 (0.813-3.109)	.180
It might make me less likely to disclose a serious error to a patient if I think I might get sued (yes)	1.718 (0.749-3.937)	.210
<b>Attitudes about patient safety</b>		
Medical errors are one of the most serious problems in health care (agree)	1.397 (0.665-2.934)	.384
Medical errors are usually caused by the failure of care delivery systems, not the failure of individuals (agree)	0.763 (0.379-1.538)	.448
<b>Attitudes about disclosure</b>		

Disclosing a serious error to a patient would be very difficult (agree)	0.920 (0.464-1.825)	.812
Disclosing a serious error would damage a patient's trust in my competence (agree)	0.858 (0.431-1.709)	.664
Endorsement of potential factors that might decrease willingness to disclose <sup>b</sup>	0.871 (0.642-1.180)	.379
<hr/>		
Prior experience		
Personally involved in a near miss or minor error (yes)	0.813 (0.255-2.596)	.722
Personally involved in a serious error (yes)	0.474 (0.234-0.959)	.032
Experienced relief after disclosing last serious error (vs disagree plus never disclosed a serious error)	4.950 (1.227-19.965)	.028

Abbreviations: OR, odds ratio; CI, confidence interval.

<sup>a</sup> Variable consisted of four levels, the three corresponding odds ratios are not reported due to space constraints

<sup>b</sup> Composite variable representing number of “yes” responses to the following question: “Which of the following factors might make it less likely that you would disclose a serious error to a patient: (a) if the patient is unaware that the error happened, (b) if I think the patient would not want to know about the error, (c) if I think the patient would become angry with me (d ) if I didn't know the patient very well, (e) if I think I might get sued, or (f) if I think the patient would not understand what I was telling them.”

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Supplemental Digital Content 6. Reporting Errors within the Hospital

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Statement	Total	Department					Statistics
	N=281 (%) <sup>a</sup>	A n=61 (%)	B n=56 (%)	C n=58 (%)	D n=45 (%)	E n=61 (%)	
Doctors should report to their hospital: <sup>b</sup>							
Serious errors <sup>c</sup>	269(97)	60 (98)	52 (96)	57 (98)	40(91)	60(100)	
Minor Errors	206(74)	27 (44)	43 (78)	48 (83)	33(75)	55 (92)	$\chi^2(4)=40.7, p<.001$
Near Misses	163(59)	20 (33)	39 (71)	45 (78)	21(48)	38 (63)	$\chi^2(4)=31.5, p<.001$
My hospital has an error reporting system (Yes) <sup>c d</sup>	258(93)	61(100)	55(100)	58(100)	26(59)	58 (95)	
Errors personally reported <sup>e</sup>							
Serious Error	82 (32)	15 (25)	19 (35)	34 (60)	9 (35)	40 (69)	$\chi^2(4)=6.00, p=.200$
Minor Error	147(57)	38 (62)	22 (40)	30 (53)	14(54)	43 (74)	$\chi^2(4)=14.7, p=.005$
Near Misses	166(65)	55 (90)	28 (51)	14 (25)	10(39)	24 (41)	$\chi^2(4)=33.2, p<.001$

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None	45 (18)	4 (7)	15 (27)	14 (25)	9 (35)	3 (5)	$\chi^2(4)=22.0, p<.001$
System changes occur in hospital after errors are reported <sup>b e</sup>	189(74)	50 (82)	27 (52)	44 (79)	20(74)	48 (81)	$\chi^2(4)=15.7, p=.002$
Current reporting systems are adequate. <sup>b</sup>	173(63)	43 (71)	26 (48)	39 (67)	20(47)	45 (75)	$\chi^2(4)=15.7, p=.003$

<sup>a</sup> Due to missing data, total responses range from 281 to 276. Missing data for a department did not exceed 2 responses for any question.

<sup>b</sup> Data are given as proportion of each group that agrees with the statement. “Agree” includes those who agree plus those who strongly agree.

<sup>c</sup>Cell sizes were too small to be analysed.<sup>d</sup> Data are given as proportion of each group that responded “yes” to the statement.<sup>e</sup> Data are given as proportion of each group that responded “yes” to the statement “Does your hospital have an error reporting system to improve patient safety?” Due to missing data, sample size was 257.

Supplemental Digital Content 7. Factors Associated with Strong Agreement That Serious Errors Should Be Reporting to Hospital

Variable	OR (95% CI)	p- value
Demographic characteristics		
Years in practice	0.943 (0.914-0.973)	<.001
>75% of time in direct patient contact	1.19 (.713–1.985)	.507
Age	0.951 (0.923-0.980)	.001
Sex	0.970 (0.613-1.662)	.970
Language (German vs French)	1.141 (0.694-1.876)	.604
Religion <sup>a</sup>		.848
Attitudes about patient safety (agree/disagree)		
Doctors should report near misses to improve patient safety	2.930 (1.712-5.017)	<.001
Medical Errors are one of the most serious problems in healthcare	0.921 (0.509-1.666)	.784
Medical Errors are usually caused by failure of care delivery systems, not failures of individuals	0.897 (0.531-1.517)	.686
At my hospital, system changes to improve patient safety occur after errors are reported	2.097 (1.155-3.807)	.015
Current systems for doctors to report errors are adequate	1.782 (1.062-2.991)	.029
Malpractice risk		
Somewhat likely or likely that they would receive a malpractice complaint within the next year (vs somewhat or very unlikely)	1.389 (0.826-2.335)	.215



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Prior Experience

Personal involvement in a serious error (vs other error involvement or none)	1.006 (0.608-1.663)	.982
Previously reported a serious error (vs reporting other errors or none)	0.939 (0.537-1.643)	.826

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<sup>a</sup> Variable consisted of four levels, the three corresponding odds ratios are not reported due to space constraints

#### **4.4. Discussion**

This study has resulted in a number of key findings. First, very few respondents had received any disclosure training despite great interest in such training. Second, respondent showed a low willingness to report minor errors and near misses. Third, our data points towards an important influence of local culture on the willingness to report and disclose errors, and that legal fears may not be the most important barrier to error disclosure and reporting.

Respondents' widely endorsed disclosing harmful errors to patients, and their willingness to disclose serious errors and minor errors is comparable to the findings of the largest study conducted to date on error disclosure involving physicians from multiple specialties in the United States and Canada.[22] However, while all respondents agreed that they should disclose serious errors to patients, many reported certain factors might make them less likely to actually disclose. Anaesthesiologists who had been personally involved in a serious error were also less likely to strongly agree that serious errors should be disclosed to patients, despite the majority of respondents who had previously disclosed a serious error reporting positive experiences. This is somewhat concerning and may reflect the significant emotional impact that serious errors can have on physicians. Furthermore, a number of respondents disagreed that they should disclosure minor errors to patients. There is an ethical responsibility to maintain honest communication with patients and their families even in cases of less harmful errors, and studies conducted internationally have indicated that patients are virtually unanimous in wanting all harmful errors disclosed.[23-24] Disclosing an error is one of the most complex and difficult conversations that occur in healthcare, and provides some unique challenges to medical specialties such as anaesthesiology given the limited contact with the patient, the absence of an ongoing professional relationship, and the complex teams in which anaesthesiologists typically work.[25-26] The complexity of these situations calls for

a strategy of training and supporting clinicians in relation to this process. However, very few of the respondents in our study had received any education or training regarding disclosure, although nearly all of the respondents were interested in receiving such education. Increasing anaesthesiologists' training (in medical school and during postgraduate training) to equip them with the skills to conduct these difficult discussions may be an important step in increasing error disclosure.

The vast majority of respondents were aware that their hospital has an error reporting system and agreed that serious errors should be reported to their hospital to improve patient safety. However, compared to other international studies in other specialities, we found much lower agreement rates for reporting minor errors and near misses. For instance, a 2007 U.S. study found that a majority of paediatricians agreed that they should report not only serious errors, but also minor errors (90%) and near misses (82%) to their hospital.[21] While there were significant differences between departments regarding this issue, this overall low willingness to report minor errors and near misses to the hospital is surprising given the leadership Swiss anaesthesiologists have previously shown in relation to error reporting. The low willingness to report near misses is particularly concerning as there has been a growing emphasis in medicine, following the example of other high risk industries, to report near misses as they occur more frequently and provide valuable lessons without the harm to patients.[27] This low willingness may reflect a lack of confidence among Swiss anaesthesiologists that their hospitals will treat these reports in a reasonable way. Respondents may also find reporting systems cumbersome and time consuming, think the incident is too trivial, and be receiving insufficient encouragement and feedback on the lessons learnt from reports.[18-19], 28 Indeed, respondents in this study were more likely to strongly agree that serious errors should be reported if they believed that reports are being used to improve patient safety. Anticipated

ineffectiveness of reporting has been identified as major barrier to error reporting.[28] In a recent Swiss study, the most important influence on the willingness to report was the transparency of the incident reporting system procedures to potential users; perceived effectiveness of reporting was a relevant antecedent at the individual level.[29]

The risk of malpractice complaints is an issue that is well known among anaesthesiologists,[30] and over half of all respondents thought that it was likely that they would receive a malpractice complaint within the next year. International studies examining clinicians' views regarding error communication have consistently found legal fears to be one of the most pervasive barriers to open communication.[10,17] However, our study found that respondents' attitudes about malpractice did not affect their willingness to disclosure or report serious errors. Indeed, the majority of respondents thought that disclosing a serious error to a patient would make it less likely that the patient would complain about them. These findings support previous research that suggests that the legal environment may have a more limited impact on physicians' error communication attitudes and practices than often believed.[22]

Instead, the culture of medicine itself may be a more important barrier to error communication than the malpractice environment as has been suggested by Gallagher in 2006.[22] Our results support this conclusion as we found significant differences in attitudes between departments regarding error communication. Given that this study only included clinically active anaesthesiologists working in university hospitals, and that Switzerland is a reasonably small and dense country, these large differences are remarkable. While differences between the French and German speaking parts of Switzerland are often expected, this was not confirmed (data not shown as locations have been anonymised). Previous research has found that physician attitudes generally vary more by specialty than by country, which points to the role

of medical culture, particularly that of the physicians' specialty, in shaping these views.[22] However, partly due to their sampling technique, these studies did not report on subgroup analysis such as department. In contrast, our study's design has allowed for the comparison of all university hospitals' anaesthesia departments in one country, and our findings suggest that individual department/hospital culture towards error communication differs strongly. As these differences are likely due to issues concerning leadership and the prevailing ethos in the broader organisation, heads of department and hospital chiefs need to be aware of how important local culture seems to be when it comes to error communication. However, further research is required to examine the reasons behind these department/hospital differences and the action needs to address these.

This study has some limitations. With the response rate being less than 60% (281/542; 52%) a generalisation of the results to all anaesthesiologists working in Switzerland's five university hospitals is not possible. However, as those who responded to our survey are likely to be generally more motivated and more interested in error communication than the non-respondents, the low willingness to communicate minor errors and near misses should be taken seriously. Our study has the usual limitations of a self-reported questionnaire: we do not know how often anaesthesiologists actually communicated errors with the hospital or to patients. Social desirability may have resulted in an over-reporting of error communication. However, this only reinforces the main result of our study that error communication remains clearly incomplete and problematic even among the more motivated and interested anaesthesiologists. There may be hospital-specific and country-specific differences in anaesthesiologists' attitudes that might limit the ability to generalise the results to anaesthesiologists in other countries. However, the significant differences in attitudes found between departments regarding error communication suggests that these issues need to be

dealt with regionally. Furthermore, the percentage of physicians who come from adjacent European countries is known to be considerable in Switzerland. Finally, while we used definitions for medical errors that have been well established in the literature, there can be wide disagreement in practice about whether a certain event constitutes an error.

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## **CHAPTER 5: THE IMPACT OF MEDICAL ERRORS ON SWISS ANAESTHESIOLOGISTS: A CROSS-SECTIONAL SURVEY**

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## **Abstract**

**Background:** Clinicians involved in medical errors can experience significant distress. This study aims to examine (1) how medical errors impact anaesthesiologists in key work and life domains, (2) anaesthesiologists' attitudes regarding support after errors, (3) and which anaesthesiologists are most affected by errors.

**Methods:** A mailed cross sectional survey completed by 281 of the 542 clinically active anaesthesiologists (52% response rate) working at Switzerland's five university hospitals between July 2012 and April 2013.

**Results:** Respondents reported that errors had negatively affected anxiety about future errors (51%), confidence in their ability as a doctor (45%), ability to sleep (36%), job satisfaction (32%), and professional reputation (9%). Respondents' lives were more likely to be affected as error severity increased. Ninety percent of respondents disagreed that hospitals adequately support them in coping with the stress associated with medical errors. Nearly all of the respondents (92%) reported being interested in psychological counselling after a serious error, but many identified barriers to seeking counselling. However, there were significant differences between departments regarding error-related stress levels and attitudes about error-related support. Respondents were more likely to experience certain distress if they were female, older, had previously been involved in a serious error, and were dissatisfied with their last error disclosure.

**Conclusion:** Medical errors, even minor errors and near misses, can have a serious effect on clinicians. Healthcare organisations need to do more to support clinicians in coping with the stress associated with medical errors.

## **5.1. Introduction**

The phrase “second victims” was introduced in 2000 to highlight the significant emotional impact that physicians involved in errors can experience.[1] Distress following error involvement is not only a tragedy for the individual clinician, but also poses risks for future patients. Empirical evidence suggests that individuals involved in major errors - without sufficient support – often suffer burn-out and depressive symptoms, which may increase the risk for future errors and loss of empathy.[2-5] Furthermore, while physicians often desire support in coping with the stress associated with medical errors many feel that hospitals fail to adequately support them,[6] although research suggests that established services are underused.[7]

While there has been research involving anaesthesiologists examining the impact of perioperative catastrophes and stress in general,[8-10] there has been limited research on the impact of errors on anaesthesiologists.[11-13] Furthermore, little is known about the impact of error involvement on clinicians outside the United States and empirical data from Europe remains limited. Quantitative data is needed to gain an understanding of the prevalence of the negative consequences following medical errors and thus the potential need for supportive measures.

In Europe, the Swiss Patient Safety Foundation was the first organization to systematically examine the issue of "second victims." [14-15] However, the handling of medical errors in general is varied in Switzerland. While the University of Basel’s Department of Anaesthesia set up one of the first critical incident reporting systems internationally in 1996,[16] implementation of reporting systems remains mixed.[17] While most systems are voluntary and anonymous, some hospitals mandate the reporting of certain errors.[18] There can also be

multiple reporting systems within the same hospitals, with some departments operating reporting systems in addition to the hospital-wide system in place.[18] A recent study also found that less than half of the responding Swiss hospitals currently have an error disclosure policy.[19] In cases of harm causing errors, Swiss liability law differentiates between self-employed and employed clinicians. While it is mandatory for self-employed clinicians to have professional liability insurance to cover any damage caused, public hospitals are typically liable in cases of damage involving hospital employed physicians.

As a part of a broader study into medical error communication in Switzerland,[18] clinically active anaesthesiologists working in Switzerland's five university hospitals' departments of anaesthesia were surveyed due to anaesthesiologists frequent involvement in errors and long standing interest in patient safety.[20-21] The aim was to examine how medical errors impact Swiss anaesthesiologists in key work and life domains, anaesthesiologists' attitudes regarding support after errors, and which anaesthesiologists are most affected by errors. We hypothesized that attitudes towards support after errors are connected to hospital culture and policies, and hence we will compare differences in attitudes between departments. The primary outcome measure is the emotional and professional impact of errors, attitudes towards support following errors, and factors predicting increased distress.

## **5.2. Methods**

The study was approved by Prof A Perruchoud, Chairperson of the Ethics Committee of Basel, on 6 January 2012. Informed consent was implied by returning the survey.

### *Survey Implementation*

This anonymous survey was conducted between July 2012 and April 2013. Surveys were not sent to departments at the same time due to logistic considerations and availability of departments. Surveys were mailed to a total of 542 clinically active anaesthesiologists working in Switzerland's five university hospitals' departments of anaesthesia: department A (n=77), department B (n=145), department C (n=115), department D (n=85) and department E (n=120). Participation was encouraged through repeated email reminders via the Chiefs of Departments.

### *Survey Contents*

The survey was a modified version of a survey conducted in the North American setting,[6] which was kindly provided by Thomas H. Gallagher from the University of Washington. Questions were translated into German and French and were pilot tested with a total of 11 medical doctors (five German speaking, six French speaking) to ensure clarity and item comprehension. Respondents were asked to indicate types of medical errors they had personally been involved in. Definitions established in previous studies were provided at the beginning of the questionnaire: medical error (the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim), serious error (error that causes permanent injury or transient but potentially life-threatening harm), minor error (error that causes harm which is neither permanent nor potentially life threatening) and near miss (an error that could have caused harm but did not, either by chance or timely intervention).[22-23] The impact of errors was assessed by asking if errors affected five work and life domains (Yes/No). The issue of support after errors was assessed by asking respondents if hospitals adequately support them in coping with the stress associated with medical errors (4-point Likert scale "strongly disagree" to "strongly agree"), how interested they would be in

psychological counselling after a serious error (“not at all interested” to “very interested”), and whether certain factors would be barriers to seeking counselling (Yes/No). Demographic questions asked for respondents’ age, sex, religion, level of training, position, and the percentage of time they spent in direct patients contact. The survey took approximately 10 minutes to complete.

### *Statistical Analysis*

Descriptive statistics included means and standard deviations for continuous variables and percentages for categorical variables. Questions that used 4-point Likert response scales were dichotomized at the midpoint (agree vs disagree) because sample sizes for some cells were often too small to be analysed. To analyse characteristics of respondents, the impact of errors and support after an error, we used chi-squared tests for categorical data and t-tests for continuously distributed data. To assess potential predictors of increased distress following errors we first preselected 17 candidate predictors, including demographic characteristics, prior error involvement, attitudes about errors, and prior experience with error disclosure based on theoretical considerations and previous findings.[6] The predictor years in practice was removed from all analyses as it was highly correlated with age ( $r=.95$ ) and position ( $r=.76$ ). We then used three different models to test the impact of these predictors. First we ran univariate regression analyses for each predictor in a separate model, providing regression coefficients unadjusted for all other predictors. Second we used multiple regression models to test all predictors simultaneously, providing regression coefficients adjusted for all other predictors. Multiple regression models often suffer from overfitting, especially if the number of predictors is high relative to the number of cases,[24] leading to models having low predictive accuracy when predicting new samples. In order to avoid overfitting we used a variable selection procedure, penalized regression, as a third model. In penalized regression,

model coefficients are deliberately shrunk by implying a penalty term to the estimated sum of squares of the residuals when fitting the model. As a consequence these models are somewhat more biased than those obtained from multiple regression, but instead exhibit strongly increased predictive accuracy.[25] For penalized regression we used the grouped exponential lasso (GEL) technique as implemented in the R package *grpreg* (Breheny & Huang, submitted). The GEL is a regularization technique that basically eliminates unimportant predictors from the model by setting their coefficients to zero. Relevant predictor variables in contrast remain in the model, their coefficients being usually shrunk towards (but not to) zero. Thus predictors whose coefficients from penalized regression have not been shrunk to zero are likely to be predictive when replicating the study under consideration. The predictive accuracy of the model is determined by cross validation. Thus predictors are considered as relevant if their coefficients turn out to be non-zero in the best fitting model based on cross validation. The term „group“ in GEL refers to the fact that predictors denoting factors with more than two levels are not decomposed into dummy variables and tested individually, but tested as a whole. Since for the GEL no tests of significance are yet available we refrain from reporting p-values.[26] Since the outcome variable was dichotomous the penalized regression model was based on a logistic regression model. Significance level alpha was set to 0.05, assuming two-tailed tests.

### **5.3. Results**

#### *Characteristics of Respondents*

The response rate of the survey was 52% (281/542). Overall, 56% of respondents were male, respondents had been in practice for a median of 9.0years and 92% of respondents spent more than half of their time in direct patient contact. Response rate, mean age, sex ratio, mean years



in practice, and position all significantly varied among departments, whereas percentage of time in direct contact with patients did not

### *Impact of Errors*

Distress following errors was reported by many anaesthesiologists (see Table 1). Respondents reported that errors that they had been involved in particularly negatively affected their anxiety about future errors (51%) and their confidence in their ability as a doctor (45%), both of these percentages strongly varied among departments. Ninety per cent of anaesthesiologists reported that at least one of the five areas of their lives was negatively affected. Anaesthesiologists who had experienced an error were divided into three groups depending on the most severe type of error in which they had been involved: a serious error, a minor error, or a near miss. Anaesthesiologists' lives were consistently more likely to be affected as error severity increased though the impact was still considerable even for minor errors and near misses (see Figure 1).

### *Support After An Error*

Ninety per cent of anaesthesiologists disagreed that hospitals adequately support them in coping with the stress associated with medical errors (30% strongly), these percentages strongly varied among departments. Ninety-two per cent of anaesthesiologists reported that they were somewhat or very interested in psychological counselling after a serious error. However, anaesthesiologists identified a number of barriers to seeking psychological counselling. For instance, 34% of respondents felt that they did not have time to take time off work, 17% were concerned that the use of psychological support would be noted in their personnel file, 17% did not believe that counselling would be helpful, although these percentages strongly varied among departments (see Table 2).

### *Factors Predicting Increased Distress*

Factors that were found to be predictive for the outcomes “increased anxiety about future errors” and “loss of confidence in ability as a doctor” are shown in Table 3. Increased anxiety of future errors and losing confidence in their ability as a doctor both varied depending on the department anaesthesiologists came from. Female’s anxiety of future errors was higher than that of males, whereas for confidence in ability as a doctor differences between sexes were either absent (multiple regression) or present but of small magnitude (univariate and penalized regression). Anaesthesiologist who had previously been involved in a serious error reported increased anxiety of future errors and decreased confidence in their ability as a doctor relative to those who had not been involved. In addition, anxiety of future errors was increased in anaesthesiologists who were dissatisfied with how both their last minor and their last serious error disclosure went. Finally loss of confidence in their ability as a doctor increased with increasing age. For outcomes “ability to sleep” and “job satisfaction” neither the multiple nor the penalized regression model returned any significant predictive factors, respectively. Only the univariate models lead to significant results in two or one cases, respectively, but correcting for multiple testing rendered these results non-significant. For the outcome “professional reputation” cell sizes were too small to be analysed. Results based on these three outcomes are therefore not shown in Table 3.

Fig. 1 Impact of errors by level of severity. Serious error ■ minor error ▨ and near miss □

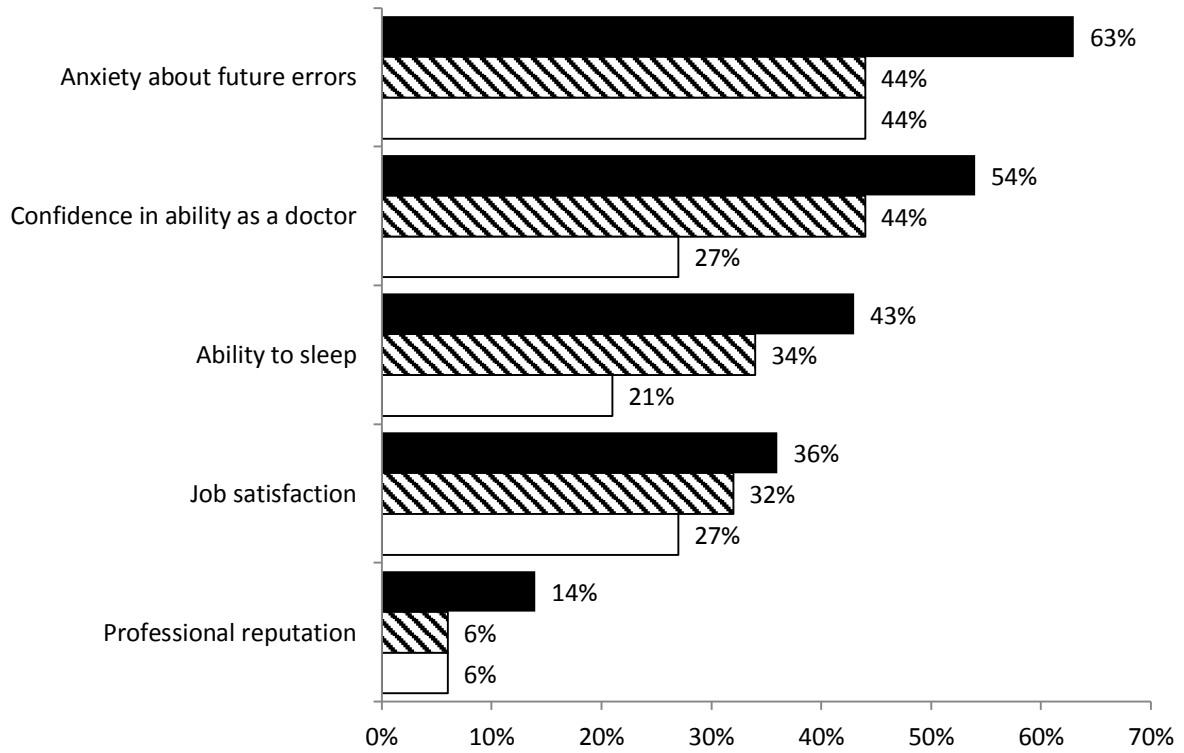


Table 1. Impact of Errors

Statement	Total	Department					p-value
		A	B	C	D	E	
	N=281	n=61	n=56	n=58	n=45	n=61	
	(%)	(%)	(%)	(%)	(%)	(%)	
Error involvement has negatively impacted: <sup>a</sup>							
Job satisfaction	91 (32)	20 (33)	13 (23)	22 (38)	15 (33)	21 (34)	.540
Confidence in ability	127(45)	16 (26)	25 (45)	30 (52)	20 (44)	36 (59)	.006
Professional reputation	26 (9)	4 (7)	6 (11)	4 (7)	4 (9)	8 (13)	.709
Anxiety about future errors	143(51)	16 (26)	30 (54)	31 (53)	31 (69)	35 (57)	<.001
Ability to sleep	100(36)	23 (38)	16 (29)	23 (40)	16 (36)	22 (36)	.782
No impact	29 (10)	8 (13)	9 (16)	8 (14)	1 (2)	3 (5)	.078

<sup>a</sup> Data are given as proportion of each group that responded “yes” to the statement.

Table 2. Support Following Errors

Statement	Total	Department					p-value
		A	B	C	D	E	
	N=281 (%) <sup>a</sup>	n=61 (%)	n=56 (%)	n=58 (%)	n=45 (%)	n=61 (%)	
Hospitals adequately support doctors after medical errors (disagree). <sup>b</sup>	248 (90)	57 (93)	51 (94)	55 (97)	40 (89)	45 (75)	.001
Interested in psychological counselling after a SERIOUS error <sup>c</sup>	258 (92)	58 (95)	50 (91)	54 (93)	41 (90)	55 (90)	.609
Reasons for not seeking psychological counselling: <sup>d</sup>							
Unable to take time off work.	95 (34)	11 (18)	24 (43)	23 (40)	13 (29)	24 (39)	.026
Concerned not confidential in case of lawsuit.	31 (11)	5 (8)	5 (9)	8 (14)	6 (13)	7 (12)	.834
Concerned it would be noted in my personnel file.	49 (17)	4 (6)	19 (34)	10 (17)	7 (16)	9 (15)	.003

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Concerned it would	16 (6)	3 (5)	5 (9)	3 (5)	1 (2)	4 (7)	.684
affect liability							
insurance.							
Concerned	46 (16)	6 (10)	11 (20)	12 (21)	3 (7)	14 (23)	.086
colleagues would							
judge negatively.							
Belief it would not	49 (17)	5 (8)	6 (11)	12 (21)	16 (36)	10 (16)	.003
be helpful.							

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<sup>a</sup> Due to missing data, total responses range from 281 to 277. Missing data for a department did not exceed 2 responses for any question.

<sup>b</sup> Data are given as proportion of each group that disagrees with the statement. “Disagree” includes those who disagree plus those who strongly disagree.

<sup>c</sup> Data are given as proportion of each group that were somewhat or very interested in having access to psychological counselling after a serious error.

<sup>d</sup> Data are given as proportion of each group that responded “yes” to the statement.

Table 3. Factors Predicting Increased Distress

Predictor	Anxiety about future errors			Confidence in ability as a doctor		
	Univariate Model	Multivariate Model	Penalized Model <sup>a</sup>	Univariate Model	Multivariate Model	Penalized Model <sup>a</sup>
Department <sup>b</sup>	_ ***	_ ***	diff	_ **	_ **	diff
Demographic characteristics						
Position <sup>b</sup>	_ ns	_ ns	no diff	_ ns	_ ns	no diff
>75% of time in direct patient contact	0.917 <sup>ns</sup>	0.867 <sup>ns</sup>	1	0.954	1.163	1
Age	1.043 <sup>ns</sup>	1.331 <sup>ns</sup>	1	1.232	1.529	1.446
Sex	0.513 <sup>**</sup>	0.274 <sup>***</sup>	0.364	0.688	0.597	.776
Religion <sup>b</sup>	_ ns	_ ns	no diff	_ ns	_ ns	no diff
Prior Error Involvement By Severity						
Near Miss	1.389 <sup>ns</sup>	2.040 <sup>ns</sup>	1	1.195	1.257	1
Minor Error	1.187 <sup>ns</sup>	0.634 <sup>ns</sup>	1	1.357	1.350	1
Serious Error	2.304 <sup>***</sup>	4.714 <sup>***</sup>	2.321	1.876 <sup>*</sup>	3.123 <sup>**</sup>	2.173
Attitudes About Error						

Hospitals support physicians adequately in coping with stress related to errors (disagree)	1.041 <sup>ns</sup>	0.870 <sup>ns</sup>	1	0.694 <sup>ns</sup>	0.716 <sup>ns</sup>	1
Somewhat likely or likely that they would receive a malpractice complaint within the next year (vs somewhat or very unlikely)	1.028 <sup>ns</sup>	0.932 <sup>ns</sup>	1	0.944 <sup>ns</sup>	0.806 <sup>ns</sup>	1
Medical Errors are usually caused by failure of care delivery systems, not failures of individuals (disagree)	1.296 <sup>ns</sup>	0.952 <sup>ns</sup>	1	1.282 <sup>ns</sup>	1.113 <sup>ns</sup>	1
<b>Prior Experience with Errors Disclosure</b>						
Dissatisfied/satisfied with how their last serious error disclosure went/not disclosing <sup>c</sup>	— <sup>ns</sup>	— <sup>ns</sup>	0.701 <sup>d</sup>	— <sup>ns</sup>	— <sup>ns</sup>	1
Dissatisfied/Satisfied with how their last minor error disclosure went / not	— <sup>*</sup>	— <sup>*</sup>	0.473 <sup>d</sup>	— <sup>ns</sup>	— <sup>ns</sup>	1



disclosing <sup>c</sup>						
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<sup>a</sup> In penalized regression models, coefficients on the logit scale are shrunk toward 0 relative to the multiple regression model and uninformative coefficients are actually set to 0. Since odds ratios are reported, these are accordingly shrunk toward 1, or set to 1 if uninformative.

<sup>b</sup> Predictors department, religion, position, and prior experience with errors disclosure (last two rows) had more than two levels and no coefficients are reported. Significances shown refer to the omnibus test of differences among the different levels. For the penalized model, since no significances are reported “diff” means that at least one of the levels was not shrunk to 0 and “no diff” means that all levels were shrunk to 0.

<sup>c</sup> Satisfied *versus* not satisfied or not available.

<sup>d</sup> Coefficient denotes odds ratio of level one relative to the mean of the other two levels.

Note. Coefficients are all standardized.

#### **5.4. Discussion**

The two key findings to emerge from this study were that anaesthesiologists' commonly experienced distress, even after a minor error or near miss, and that the vast majority of anaesthesiologists disagreed that hospitals adequately support them in coping with the stress associated with medical errors. These results are consistent with the largest study conducted internationally to date on medical errors involving 3171 physicians from multiple specialties in the United States and Canada published in 2007 by Waterman and colleagues,[6] despite the physicians involved coming from different health systems and specialities.

There were, however, significant differences between departments regarding error-related stress levels and attitudes about error-related support. Increased anxiety of future errors and losing confidence in their ability as a doctor significantly varied depending on the department anaesthesiologists came from, and while the vast majority of anaesthesiologists disagreed that hospitals adequately support them in coping with the stress associated with medical errors, there was significant variation between departments. The differences likely have their root in the heterogeneous clinical landscape in Switzerland, which is a result of the large degree of political autonomy of cantons and local communities. It is not clear, however, whether the differences in attitudes regarding error-related support are due to department/hospital culture, or reflect actual differences of support provided by hospitals. Further research is required to establish the root of these differences.

In contrast, Waterman and colleagues found that respondents from the United States and Canada did not differ significantly in their error-related stress levels and attitudes about error-related support.[6] However, partly due to their sampling technique, this study did not report on subgroup analysis such as department. Our study's design has allowed for the comparison

of all university hospitals' anaesthesia departments in one country, and our findings suggest that individual department/hospital culture influences certain error-related stress levels.

Certain anaesthesiologists were also found to be more likely to experience increased distress, which support systems will need to take into consideration. Similar to previous research,[6] those dissatisfied with their last error disclosure were much more likely to report increased anxiety about future errors. This highlights the long-term importance of a “good error disclosure experience”, not only for affected patients and families but also for the involved clinicians. Indeed, providing support for error disclosure towards patients may also mitigate emotional distress associated with future errors.

Support systems will also need to address the barriers anaesthesiologists identified in relation to seeking support. ‘That colleagues would judge negatively’ was named as a barrier to seeking support by 16% of respondents. While many physicians find it difficult to talk to colleagues about mistakes,[27-28] many wish to receive support from colleagues in the aftermath of an error.[4,28] It has been suggested that supporting a culture of constructive criticism amongst colleagues may be an important step to increase physicians' resilience against stress following medical error involvement.[13] Furthermore, a third of respondents thought that they did not have time to take time off work, which is also similar to Waterman and colleagues' North American study findings.[6] The inability to take time off work to receive support has also been an issue of concern in studies examining the impact of perioperative catastrophes. For instance, White and Akerele surveyed 251 English anaesthesiologists. While the majority agreed that it was reasonable for medical staff not to take part in operations for 24 hours after an intraoperative death, “given the significant financial, logistical and personnel implications involved in employing secondary operating

teams and cancelling elective operating lists, this notion was rejected by the majority as impractical.”[11] White and Akerele’s recommendation, that all departments should nevertheless provide for time off if the circumstances require it, is equally applicable to cases of errors.

Our response rate was 52%, which is lower than that achieved by Waterman and colleagues (64%),[6] but is comparable to previously published survey studies of physicians.[12,29] This study has the typical limitations of survey studies. Recall bias may have affected results due to the length of time since the event, degree of detail remembered, and significance of event. However, in the case of our study it is likely that recall in the event of emotionally important events such as errors remains high although we cannot fully exclude that individual sensitivity and age related factors have influenced recall.[13] Responder bias may have also influenced the results as those who responded to survey are more likely to be generally more interested in medical errors and more willing to be open about their distress. Social desirability may have resulted in an under-reporting of error distress. Participants in our sample were clinically active anaesthesiologists from the five university hospitals in Switzerland which may limit generalizability. However, in favour of wider generalizability is the fact that the percentage of physicians who come from adjacent European countries is known to be considerable in Switzerland. Furthermore, the significant differences found between departments in error-related stress levels and attitudes about error-related support suggests that regional studies are crucial to understand the impact of errors.

It is clear that healthcare organisations need to do more to support clinicians in coping with the stress associated with medical errors. Clinicians often “suffer in silence” following a medical error as they are not offered the support that they need.[30] For example, Joesten et

al. report that only 10% to 30% of respondents to their survey reported that various support services or interventions were actively offered to them after an incident.[31] This may potentially occur more often after minor errors and near misses because the incident is not considered serious enough. It is therefore important that heads of departments and hospitals chiefs are aware that even minor errors and near misses can have a serious effect on clinicians.

Scott and colleagues have reported a post-event trajectory involving the six stages (1) chaos and accident response, (2) intrusive reflections, (3) restoring personal integrity, (4) enduring the inquisition, (5) obtaining emotional first aid and (6) moving on.[32] Given this trajectory, they note that “Institutional programs could be developed to successfully screen at-risk professionals immediately after an event, and appropriate support could be deployed to expedite recovery and mitigate adverse career outcomes.”[32] Indeed, there have been a number of institutional interventions and experiences regarding supporting clinicians following errors reported in the literature.[31, 33-36] It has been suggested that “one of the reasons that health care organizations do not routinely offer emotional support might be that their leaders do not know how to develop and successfully implement a support system.”[33] Scott and colleagues found that in the absence of another structure to imitate, it took the University of Missouri Health Care system nearly four years to develop and implement a second victim support process.[36] To assist healthcare organisations in developing and implementing a second victim support system, Pratt and colleagues have designed a toolkit which can be requested free of charge in exchange for feedback.[33] More research is needed in Europe on local support systems, however, European organisation may be able to use the experiences of these U.S: organisations reported in the literature as a guide to developing and implementing their own support systems.

## Conclusion

Medical errors, even minor errors and near misses, can have a serious effect on clinicians. Healthcare organisations need to do more to support clinicians in coping with the stress associated with medical errors.

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## **CHAPTER 6: CRIMINAL LIABILITY AND MEDICAL ERRORS IN SWITZERLAND: AN UNJUST SYSTEM?**

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## **Summary**

As a part of a broader study into medical error communication in Switzerland, 23 key medicolegal informants in Switzerland were interviewed. A major theme to emerge from these discussions was the issue of criminal liability. This article presents these findings and considers whether the current system in Switzerland is a morally meaningful and just system of culpability in light of theoretical and ethical considerations.

### **6.1. Introduction**

Marianne Paget argues in her landmark book “The Unity of Mistakes: A Phenomenological Interpretation of Medical Work” that mistakes are an intrinsic feature of medical work which she calls an ‘error-ridden activity’ precisely because it is inexact, uncertain and practised on the human body.[1] The consequences of such medical errors can be immense, causing disabling injuries or death to hundreds of thousands of patients worldwide each year.[2]

When things go wrong “the usual human response is to apportion blame, demand retribution and compensation, and seek assurance that the error will not occur again.”[3] The law has an important role in meeting society’s need for accountability in such circumstances. One way this may be achieved is via the criminal law, which “is the strongest mechanism through which the state can hold an individual to account for actions that are contrary to the public interest.”[4] However, with harm causing events in medicine involving conduct ranging from the blatantly reckless to a momentary slip, the difficulty is to find a morally meaningful and just system of culpability.

There currently exists significant variation in the ambit of the criminal law in relation to patient harm in different jurisdictions. For example, English law require more than simple

negligence to justify criminal prosecution in cases of patient harm and is generally limited instances of death: “A doctor who makes a “bad enough” medical error to cause the death of a patient can be prosecuted for criminal negligence manslaughter...Negligent acts, however reckless, that have non-fatal consequences, are not crimes in English law.”[5] In contrast, criminal proceedings can be initiated in Switzerland for negligent acts that cause non-fatal bodily injury and death (involuntary manslaughter), pursuant to Articles 125 and 117 of the Swiss Penal Code.

As a part of a broader study into medical error communication in Switzerland, key medico-legal informants were interviewed to explore their general attitudes towards medical errors, perceived barriers to error communication and potential ways of improving the situation. A major theme to emerge from these discussions was the issue of criminal liability. The aim of this paper is twofold. First, it will present the major themes that were expressed by the key informants’ in the interviews regarding criminal liability in Switzerland in relation to medical errors. Second, it will evaluate whether the current system in Switzerland is a morally meaningful and just system of culpability in light of theoretical and ethical considerations.

## **6.2. Methods**

Possible interview partners were identified through discussions with collaborators and wider contacts. Key medico-legal informants were contacted by email and suitable dates for an interview were found with those willing to participate. As the interviewer [S.M.] was a non-native German and French speaker, all interviewees were given the option to have a translator present. This offer was not taken up and all interviews were conducted in English.

A total of 23 semi-structured interviews were conducted between October 2012 and February 2013. One interview was conducted via a Skype video call; all others were conducted in person at a venue of the interviewee's choosing. Key medico-legal informants included the quality heads at large public teaching hospitals, a quality practitioner from a private federation, law professors specialising in medical law and criminal law, a university hospital lawyer, a chief of surgery, chiefs of anaesthesia, a university hospital medical director, a former Dean of Medicine, representative, representatives of a liability insurer, a private sickness fund, a physician association, and a patient safety organisation. Questions used to prompt discussion included: Are errors a serious problem in healthcare? What do you see as the main barriers to the communication of medical errors (to patients/colleagues/hospitals) in Switzerland? What measures could promote medical error communication in Switzerland?

Interviews were recorded and lasted an average of 52 minutes. All recordings were transcribed verbatim and anonymised. Open coding qualitative analysis was performed by the investigator who conducted the interviews [S.M.]. Another investigator [B.E.] then reviewed to clarify and refine codes. Coding differences were resolved to achieve consensus. The Ethics Committee of Basel (Chairperson Prof A Perruchoud) confirmed on 6 January 2012 that the study did not require ethics approval.

### **6.3. Results**

We present the results according to the themes of analysis.

#### *Frequency and Impact*

Informants felt that criminal cases in the context of harm causing medical errors were reasonably rare:

“Not really. Four years I have been here, one problem; it was a tragedy.” P6

“...in practice you have such a limited number of cases in criminal liability.” P15

Indeed, some informants thought that the criminal process was generally only used as an option of last resort for patients frustrated by their treatment following an error and that as long as clinicians were open and empathic with patients the issue of criminal liability would not likely arise:

“...you don’t sue your doctor for criminal liability unless you really don’t have the choice...the doctor has to be really a nasty way to be sued for that. We teach medical students that if they accept their errors, if they are modest, if they are empathic with their patients then they will never be sued for criminal liability.” P15

“It doesn’t make sense to go to court against somebody who has owned up. You might want to talk about money, if you have spent half a year longer on recovery there are costs involved, somebody has to carry those costs, but there is not much sense in getting somebody into severe difficulty with...the criminal law system.” P22

Informants felt that there was a general reluctance to initiate criminal cases in the context of medical errors, reporting that defence lawyers were more focused on gaining compensation via civil proceedings, while many criminal prosecutors disliked such cases due to their complexity, duration and the likelihood of failure:

“Yes, but from what I hear from lawyers in the field, they, well not all of them, a number of them, try to avoid filing a criminal complaint against a doctor. Usually they look for compensation.” P12

“The prosecutors are not really happy to be in the hospital because of an error. They have no idea what is what. They look into an operation theatre, or intensive care unit, it’s like looking into a cockpit of an aeroplane. They don’t know what is what, who makes what. And usually these claims last a lot of years. For the usual the prosecutor has no success. And therefore half of the prosecutors hate to go into hospitals.” P6

While criminal cases were perceived to occur infrequently, informants noted the significant negative impact involvement in such a case can have on clinicians, often destroying their professional lives and reputations and having a significant impact on their personal lives and health:

“...the problem is getting involved in criminal proceedings, that’s really stigmatic. It’s destroying your reputation. That’s the problem, just involvement.” P2

“We had several colleagues here having gone through exactly this, and this is very hard. I mean, at this time when all the stories started I had problems to find my sleep, quality of life was really bad, I had to work days and weeks together with a lawyer just to bring the arguments into a correct light. And then finally it ended up that the court thought: well this has not been a crime.” P10



### *Low Threshold*

A key aspect of criminal liability in Switzerland that informants stressed was the low threshold required for criminal negligence. Informants noted that the ambit of criminal liability in Switzerland includes all types of harms, and that intention or gross negligence does not have to be demonstrated:

“Yes, I think this is a further problem. You don’t need to show either intention or gross negligence to file a criminal complaint. As soon as a patient is injured he can file a criminal complaint and then there will be an investigation and usually it will not go further but...” P12

It was felt that this situation can be exacerbated by the mandatory prosecution of such cases that officially exists. Informants reported, however, that informally, whether or not a case is prosecuted very much depends on the discretion of the criminal prosecutor involved. Nevertheless, a number of cases were discussed that have been very harmful for the clinicians involved but have not resulted in a conviction. However, it was also reported that since 2011, procedural codes have explicitly stated that if there is little chance of a conviction then the case should be stopped:

“It’s negligence, yeah. And for that it’s not just serious negligence, grave negligence. It is also in principle petty cases could be picked up and what’s more there is no discretion picking up. Officially there is mandatory prosecution, which causes a big difficulty; informally of course there is a kind of discretion. They would not pick up a case they know from the beginning is not going to go anywhere. So it does depend

very much of the person in charge, but you are right, any kind of negligence would be sufficient.” P22

Many informants felt, however, that it was inappropriate to consider clinicians, who are attempting to help patients but cause harm through unintentional slips or mistakes, as criminals. Nonetheless, the option of criminal liability was seen to be important by some informants, but given the time and resources involved and the significant impact on clinicians’ lives, they felt the criminal process should be limited to the most extreme cases:

“No. You’re not a criminal because it’s not your intention to make a mistake in the patient...I have been in court, as a specialist, and that I had to explain to the judge that in contrast to a criminal situation it was not the intention of the medical doctor to do this. I will not harm the patient, I will help him. So it’s very different, and you have to explain that to the people because not every time they see the difference. It’s a crime to them.” P7

“Well...of course my entry point as a criminal lawyer is what is the role of criminal law vis-a-vis errors and of course there is a role but it is a role for absolute extreme cases...Otherwise, criminal lawyers are very, very quickly out of their depth. I think one has to be very clear there. First of all, for practical reasons criminal lawyers, especially prosecutors, have no idea what it is all about, so they would have to get experts for everything...and that makes sense when, on the face of it, something very serious has happened. If it is a borderline case you end up tarnishing someone’s reputation. You have the case dragging on for years and in the end, usually the cases

are closed. So it is very wasteful, the whole process...and yet the option has to be there. That's clear." P22

### *Individual vs. System*

Another fundamental aspect of Swiss criminal liability informants stressed was its focus on individual failure and blame. While it was noted that other industries and areas of laws have shifted to taking systematic failures into consideration, it was felt that the criminal law has not. The focus on individual failure and blame was seen by many as outdated and particularly unsuited in cases of medical errors:

"...a general tendency over the last 20 years, to move away from personal wrong doing or let's say, to imbed personal wrong doing in a systemic failure, and then to say, ok, let's go against, for instance a corporation because they've allowed somebody to commit a mistake. So this approach is quite common. Unluckily I must say in the frame work of criminal law, and in the health sector, this hasn't really taken hold. It does apply from a, let's say, administrative legal point of view. So if something goes wrong or let's say, work laws or within labour law...these areas, of course, the shift has been undertaken. With criminal law we're kind of the last to understand the systems are the topic and not individual failure, because criminal law is about, it's relatively crude, it is about individual failure...criminal law is really an archaic, crude instrument and was developed for serious misbehaviour of individuals, and it has to do with the attribution of blame and this doesn't fit the situation." P22

Informants also discussed how the criminal law's general difficulties in dealing with corporations were exacerbated when the hospital involved is a public entity, as the state

cannot go against the state in the courts. However, they noted that monetary damages were reasonably easy to obtain from the state via civil or administrative law:

“With criminal law, we have difficulties because we already have difficulties in general with companies because they’re not people. So criminal law being this, you know, blaming individuals, how can you blame a company? That is already a big step...But taking it a step further, saying that this corporation here is not a private hospital, but it is a state owned hospital, then it is kind of strange, then you have the state punishing the state. That beats the system as far as it’s developed here.” P22

Informants working in public hospitals spoke of efforts to circumvent the criminal process by trying to direct patients and their lawyers away from making criminal complaints against individual clinicians towards civil liability where the hospital, or the hospital’s liability insurer, could come into play:

“The second one is the penal responsibility whereby you are aimed as an individual and so if you get condemned then you go to jail it’s not the hospital going to jail, or you are fined, and with the lawyer we always try to move the patient or his advocate of lawyer from this kind of affair to civil responsibility.” P5

### *Fear of Criminal Cases*

Some informants did not perceive criminal cases as an issue of concern chiefly due to their infrequent occurrence. Indeed, one informant thought that given the low amount of criminal cases being prosecuted that any fears clinicians may hold about criminal liability were misplaced:

“Yes, the doctors may have a concern about that but the figures are very clear. This is a wrong fear, a misplaced fear.” P15

However, a number of informants, particularly those who had previous personal experience with the criminal process, identified criminal liability as a significant area of concern. Criminal cases were often contrasted to civil liability cases in terms of significance and the nature of the proceedings. While civil liability was seen to be an adversarial system taking place between equals which carried no stigmatisation, criminal law occurred between the powerful state and a citizen and had wider implications than simply paying monetary damages:

“The civil proceeding is competitive, an adversarial system. It’s not the powerful state against the small citizen. It’s on an equal level, and it’s fighting, and there’s no stigmatisation about that.” P2

“Sure. And it’s the criminal side that is much more important than the civil side. Money is money, to pay the fee.” P13

Informants felt that clinicians’ fears about criminal liability, and legal liability in general, were a major barrier to error communication and quality improvement, leading to defensive statements denying errors or general statements to avoid admissions of responsibility:

“I would say that Switzerland is quite behind in that. Doctors are afraid of communicating errors because of the fear of liability, especially criminal liability more than civil liability. So what they do, the hospitals make general statements. There

could be an error happen, but they do not individualise the error and they do not say we are guilty, that there is negligence, they just say something went wrong. So they try and avoid self-accusation...criminal proceedings is really, it's a big obstacles. For me that's the major obstacle to disclosure practice in Switzerland and we should probably get rid of that." P2

"It's certainly going to be a barrier, I mean, this is clear...I would say it's pretty natural that people, in practice, will tend to defend themselves. As soon as the element of fault is in the air, no matter whether it's treated by criminal law or by other means, people will in the first instance, try to say, oh I did it correctly, it's not my fault, the patient just got up too early or it's the configuration that's not good, the wound didn't heal well. It's just, I mean, there's would be tendency first to defend yourself." P22

However, some informants felt that the true reasons for non-disclosure were actually more complex and that arguments of criminalisation were often used to conceal clinician's discomfort of speaking about their failures in general:

"People who argue that they are criminalised if they speak to the patient, they don't want to speak to the patient. They only use these arguments against speaking with the patient." P14

### *Misuse of Criminal Process*

Some informants also reported that some lawyers were using the criminal process to obtain information for free in order to then use it later in civil proceedings, in which plaintiffs would ordinarily run the risk of covering the costs of the case and uncovering evidence (table 5).

This practice was perceived to currently be occurring reasonably infrequently, but because of the negative impact criminal investigations can have on clinicians, it was seen to be very unfair:

“I know of a few lawyers who on the contrary they first make a criminal complaint so there is an investigation they then get information they can then use in the civil proceedings. But so far it has been a minority of lawyers, so far as I know. But of course it could change, and the pressure would become even bigger for physicians.”

P12

“The problem if you run a civil case, a purely civil case, not administrative. I’m not talking of a case where a public hospital is in question. If it is a private doctor, if it’s a private hospital, the problem is that you actually have to make a down payment and you have to pay to carry the cost of the court case as a plaintiff and it can be very expensive. You have the full risk and you have to advance the whole thing and especially if you want to have evidence found then you have to pay everything. So what they would like to do is to use criminal law to dig up the evidence, that’s for free and then use it for civil litigation...And then at a certain point, you tell the criminal lawyers, we don’t insist on criminal law now and that is the kind of approach that’s taken. But it has very, very negative effects because criminal law because, I mean, they can raid your premises. Well they wouldn’t put you on remand probably, they wouldn’t lock you up, but there is publicity involved. So it’s kind of unfair.” P22

### *Issues with Changing Law*

While many informants felt that the ambit, focus and impact of the criminal law in the context of medical errors were problematic, they identified a number of barriers to changing the criminal law in Switzerland.

First and foremost, informants stressed the equality of the law; the need of the law to treat cases of harm alike. The example of car accidents was used more than once by informants, who noted that car accidents which caused physical harm due to negligence would attract criminal liability, thus physical harm caused by negligence in healthcare needed to be treated comparably. It was therefore seen to be inappropriate to change the criminal law only for clinicians and not for others. Informants felt that the general public would also not accept such a change as they thought that the medical profession already received special protection. Informants also considered that removing criminal liability for non-fatal harms or simply negligence would be a major change to Switzerland's current criminal law, which they did not see occurring in the near future and often did not support. A move away from traditional criminal law would raise a number of technical issues, some of which informants found problematic, such as how to draw a line between simple negligence and gross negligence, and how to attribute responsibility to a group for failure:

“If you think about car accidents, there if you have a car accident and cause physical harm to a person by negligence, it's no question you are criminally sued for that. So if you transfer that to hospitals you have to be coherent. So the same thing is done. If a doctor causes by negligence physical harm he gets sued, criminally sued. So if you cancel that for doctors you should cancel that in other areas too, on the street too for example, and that would cause major changes in the criminal liability system. That's



obviously a European, or continental, or civil law thing, I don't know. But that really would change the system. But now as you put the question, I think it doesn't make much sense to criminally sue doctors for causing bodily harm by negligence. By intention it's a different thing, but that's not the issue." P2

"Of course we could change the criminal system but it would be a really, really big change...I would not really favour changing the system only...for healthcare professionals and not for other people as well. So we would have to think it over." P12

Informants believed that a cultural change was also needed for a reform of professional liability to occur. Many sections of the medical profession itself were still seen to be intolerant of errors and often not sufficiently aware of issues surrounding medical errors. Furthermore, informants believed that wider society was not yet willing to accept not punishing people in such cases:

"I could add that we have different worlds. We have the world of medical professionalism, where I feel in many domains as far as I'm told, there's still the feeling that mistakes have no right to occur. It is not allowed to make a mistake. So I think we have a cultural change to make, some people in the medical profession would like to make it, some did make it, some did not yet. It depends on the personalities of the chief medical officers. That's the medical profession. Then we have the society, and the society has not evolved. The big problem is that it is still a career killer that you're still in the journals if you were the one who made the mistake...I think society does not yet want to pay the price of not penalising people...We have a problem that I think many people in the medical community would like to go ahead but the society

doesn't follow politics. We have a politics problem I think and a medical cultural problem." P11b

"Well yeah, I know but the culture has to change because if you don't change culture you will improve only in a very marginal way the situation. So you have to improve culture, to change culture. To change culture you have to improve teaching, sensitise health care professionals to these issues. And then I would welcome some reframing of the law on professional liability. But really if I look at things in a very reasonable and political way, I don't see it coming in the next 10 years. I don't see any change in the criminal law system that would be too big a change." P12

Finally, informants also felt there was simply a lack of interest in Switzerland for such a change in the law. More progressive attitudes towards medical errors were seen to be largely limited to small groups of clinicians or patient safety practitioners, and became problematic when discussed publically. One informant reported that their organisation had the feeling that the Federal Office of Public Health had previously used the Critical Incident Reporting System (CIRS) for 'doctor bashing' and were generally not interested in the issue. Indeed, informants considered that wider society and politicians were simply more concerned with other issues at present and that medical errors were not on the agenda:

"I think there is not a big interest I feel for these discussions. The most parts of these attitudes are found in small groups of physicians, where you can discuss cases, where you can discuss problems, and then you do not fear a big publicity, you can discuss this in a certain privacy, but as soon as you go public in a congress or wherever, it becomes..." P11a

#### **6.4. Discussion**

This was a qualitative study that does not claim to present representative data. In this paper, we will not question whether our interviewees have correctly described the reality and simply assume that their perceptions describe a significant part of the reality in Switzerland. Indeed, the fact that we interviewed experts from different fields that have experience with medical errors makes it likely that we captured at least some part of the reality viewed from different sides. We will use these findings as a basis to explore the appropriateness of the current system in Switzerland in light of international literature in this field.

The international literature on criminal liability for medical errors suggests that it would be deeply imprudent to suggest that the criminal law has no place in the clinical setting. There will always be events that warranted a criminal response. A clinician who kills a patient by reckless acts or omissions clearly deserves punishment.[5,6] And as Runciman and colleagues argue, “[i]t is important to meet society’s needs to blame and exact retribution when appropriate.”[3] Where, however, is the appropriate place to set the bar for criminal liability in relation to patient harm that is morally meaningful and just?

Many of the interviewed informants expressed concerns that Switzerland currently has the threshold for criminal liability set very low, with any negligent act that results in bodily injury a potential candidate for a criminal investigation. Indeed, while the current incidence of criminal cases regarding patient harm may be reasonably low, we think it would be a mistake to completely dismiss fears about criminal liability in relation to harm causing medical errors on these grounds. The fact remains that any negligent act which causes patient harm may be criminally prosecuted in Switzerland, and as informants noted, there has been a number of criminal prosecutions that have been extremely harmful to the clinicians involved but have

not resulted in a conviction. Although informants thought that the option of criminal liability needed to be there for ‘extreme cases’, many felt it was inappropriate to be treating clinicians as criminals for making unintentional slips or mistakes that result in harm. Indeed, there are a number of factors that arguably make the use of the criminal law for any medical error, regardless of its outcome, inappropriate and likely to do more harm than good.[6]

One reason that may be advanced regarding the rationale of criminally punishing clinicians who have harmed patients through medical errors is that this deters other doctors from making the same mistakes in the future. However, as Merry has argued, “[t]his argument depends on the questionable prior premise that it is actually possible to deter error. Empirical and theoretical considerations suggest that this notion is unsustainable, and that to punish those in error is unjust.”[7] Merry notes that errors are unintentional, made by people trying to do the right thing but who end up doing the wrong thing. Deterrence is therefore useless in the prevention of errors and “[i]t is very unlikely that draconian punishment will reduce the incidence of medical errors.”[7]

It also appears inappropriate to criminally punish an individual clinician for medical errors on the ground of causation. As McDonald has noted:

“One of the most significant challenges associated with using the criminal law against health professionals for negligence in professional practice is that criminal law is ill-equipped to address the complexities of the environment within which health professionals commonly operate – the modern healthcare system. The paradigm of the criminal law is based upon an acknowledgement of human agency an autonomous individual makes a decision to act (or not to act) in a manner that contravenes the law

and must accept the consequences of that action or omission – it is a simple world that recognises few relational factors.”[4]

While focusing on establishing an individual clinician’s culpability may be attractive, particularly given the tradition of shaming and blaming individual clinicians who make errors with “accusations of incompetence, unprofessionalism, and unworthiness to treat patients,”[8] this contradicts what we now know about medical error causation. Research in recent decades has demonstrated that most errors are “not the outcome of individual incompetence, but of an entire system not adapting quickly enough to cope with the changing complexity of the world it is designed to manage and control.”[9] Typically, many events, all necessary and only jointly sufficient, are needed to align to result in a harm causing error that that might have been avoided if any one of the events had not occurred.[7] As James Reason’s ‘Swiss cheese’ model of error causation shows, most errors have their origins in wider organizational factors that may lay dormant within the system before combining with individual failures to breach the system’s defences.[10] Such latent conditions can create error provoking conditions (for instance, time pressure, understaffing, fatigue) and enduring weaknesses in defences (for instance, unworkable procedures and process design deficiencies). Most errors cannot, therefore, be causally attributed solely to the immediate activities of an individual.

Given the normally prolonged and expensive nature of such legal proceedings, it is also important that the legal response to medical errors promotes future safety.[7] However, criminally prosecuting well-intentioned clinicians for making errors is unlikely to improve patient safety or promote the communication of errors. As reflected by many of the informants’ responses, there is a real danger it will do just the opposite. The use of the criminal law is almost always counterproductive to finding out why things went wrong and

what to do about it, with statements about events given during proceedings “almost of necessity defensive, limited, adversarial and self-preserving.”[9] Indeed, prosecuting “an individual can protect an unsafe system from scrutiny and therefore preclude that institution from learning and improving the systems for treatment and care - an outcome that is not in the public interest.”[4] Furthermore, Dekker has also argued that:

“Another consequence of the accountability demanded by legal systems is that it is easily perceived as illegitimate, intrusive and ignorant. If you are held ‘accountable’ by somebody who really does not understand what it means to be a professional in a particular setting, such as an operating theatre, then you will likely see their calls for accountability as unfair, as coarse and uninformed. Indeed, as unjust. Social cognition research shows that this leads to excessive stress, less disclosure and a polarization of positions, rather than an openness and willingness to share and learn for the common good.”[9]

All of this speaks against the use of criminal law for any medical errors, regardless of outcome. It is important to remember that “[t]he outcome, the death or grievous injury of the patient, should not be conflated into the equation that determines how morally blameworthy or how negligent an action or omission is, yet too often this can occur.”[4] For the criminal law to be morally meaningful and just in relation to patient harm, we support the growing international calls for the focus of the criminal law in the context of patient harm to be upgraded and narrowed to willful and reckless conduct.[5,6] As Berwick has recommended, “[r]ecourse to criminal sanctions should be extremely rare, and should function primarily as a deterrent to wilful or reckless neglect or mistreatment.”[11] In other words, the criminal law

should be pursuing clinicians who do not care, instead of those who try to care but make an error.[5]

These considerations therefore suggest that Switzerland currently has the bar for criminal liability in relation to patient harm set too low. It is important to stress, however, that in arguing against the use of the criminal law in cases of medical error, we are not suggesting that medical errors should be tolerated or are not important. All reasonable steps should be taken to prevent such errors happening again. Systems, and individual clinicians, must also be appropriately held to account when patients are needlessly injured or killed. However, we do not believe that the criminal law is the appropriate mechanism to achieve this, and may even inhibit efforts to do so.

While major changes to Swiss criminal law in the foreseeable future are perhaps unlikely, further discussion and research is clearly needed on this issue. For instance, the reported misuse of the criminal process by some lawyers to gain evidence at no cost is of concern. Further research is needed to establish how wide spread this problem is and what steps could be implemented to prevent such detrimental misuse. It will also need to be considered if the other accountability mechanisms currently available in Switzerland for harmed patients to seek redress are sufficient, or whether accountability mechanisms specifically designed for healthcare (such as those in place in New Zealand [6]), may offer a better way forward.

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# **CHAPTER 7: LIABILITY INSURANCE AND MEDICAL ERROR**

## **COMMUNICATION IN SWITZERLAND**

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## **Summary**

**Question under study:** To examine medico-legal stakeholders' views about the impact of professional liability insurance in Switzerland on medical error disclosure.

**Methods:** Purposive sample of 23 key medico-legal stakeholders in Switzerland from a range of fields between October 2012 and February 2013. Data were collected via individual, face-to-face interviews using a researcher-developed semi-structured interview guide. Interviews were transcribed and analysed using conventional content analysis.

**Results:** Participants, particularly those with a legal or quality background, reported that concerns relating to professional liability insurance often inhibited communication with patients after a medical error. Healthcare providers were reported to be particularly concerned about losing their liability insurance cover for apologising to harmed patients. It was reported that the attempt to limit the exchange of information and communication could lead to a conflict with patient rights law. Participants reported that hospitals could, and in some case are, moving towards self-insurance approaches, which could increase flexibility regarding error communication

**Conclusion:** The reported current practice of at least some liability insurance companies in Switzerland of inhibiting communication with harmed patients after an error is concerning and requires further investigation. With a new ethic of transparency regarding medical errors now prevailing internationally, this approach is increasingly being perceived to be misguided. A move away from hospitals relying solely on liability insurance may allow greater transparency after errors. Legalisation preventing the loss of liability insurance coverage for apologising to harmed patients should also be considered.

## 7.1. Introduction

Despite clinicians being widely considered internationally to have an ethical, professional and legal obligation to disclose medical errors to patients,[1-4] there remains a large “disclosure gap” between expected practice and what is actually being done.[5] Clinicians’ legal fears have been identified internationally as the most pervasive barrier to disclosure.[6] One fear in particular is the risk of losing professional liability insurance coverage if too much or the wrong thing is said, due to the so-called “cooperation clauses” found in many insurance policies, which releases the insurance companies from their obligation to pay costs if liability is admitted without prior consent.[7-8] However, professional liability insurance can be critical to both parties in cases of harm causing errors; the most stringent liability rules do not help a claimant if the clinician is unable to pay damages.

In Switzerland, liability law differentiates between self-employed and employed clinicians. Since 2007, it has been obligatory for self-employed clinicians to have professional liability insurance (Federal Law on Medical Professions, MedBG). However, the MedBG does not apply to employed clinicians. If employed clinicians are working for a public hospital, their liability for medical treatment complies with the liability law (LS 170.1, Zürich). In this case, it is not the hospital liability insurance which is liable to be sued (no direct legal claim), but - depending on the hospital’s funding body – the state, the independent public institute, the administration union or the municipality. During the damage assessment, which is carried out by the insurers in accordance with the liability law, certain formal responsibilities remain with the hospital’s funding body. Accordingly, their involvement in the resolution of the case is to a certain extent mandatory.

Every hospital is obligated to cover their third-party liability risk in the appropriate form, independently from their legal structure – whether they are run by the Canton, the municipality or by a private company, and whether they receive subsidies (see § 36 Abs. 2 in connection with § 12 Abs. 2 general health law for the canton Zurich [GesG, LS 810.1]). It is the hospital's responsibility to cover this risk, whether they guarantee the coverage through liability insurance, by creating accruals or through a combination of accruals and liability insurance.

As a part of a broader study into medical error communication in Switzerland, key medico-legal stakeholders were interviewed to explore their general attitudes towards medical errors, perceived barriers to error communication and potential ways of improving the situation. One major theme to emerge from these discussions was the issue of liability insurance. The aim of this paper is to examine medico-legal stakeholders' views about the impact of professional liability insurance on medical error disclosure in Switzerland. It will also evaluate this reported impact in light of international trends and ethical considerations.

## **7.2. Methods**

The study was approved by Prof A Perruchoud, Chairperson of the Ethics Committee of Basel, on 6 January 2012. Informed consent was implied by returning the survey. The methods of the study are presented in accordance with the “Consolidated criteria for reporting qualitative research” (COREQ).[9]

### *Research team and reflexivity*

Interviews were conducted by S.M., a male PhD student in biomedical ethics, who had previous training and experience in qualitative research.[10] No relationship was established

between S.M. and the participants prior to the study and participants received limited information about S.M. There was no hierarchical relationship between SM and the study participants and we are not aware of any particular biases of S.M. concerning the research topic. D.S. has been involved in several qualitative publications.[11-13] A.L. has several years of experience with qualitative studies.[14-16] B.E. has a longstanding experience with qualitative studies.[17-19]

### *Study design*

The theoretical framework employed in this study was conventional content analysis.[20] We primarily selected participants through purposive sampling, in order to ensure that participants were from different backgrounds and to capture a variety of experiences. Possible interview partners were identified through discussions with collaborators and wider contacts. Key medico-legal stakeholders included the quality heads at large public teaching hospitals, a quality practitioner from a private federation, law professors specialising in medical law and criminal law, a university hospital lawyer, a chief of surgery, chiefs of anaesthesia, a university hospital medical director, a former Dean of Medicine, representatives of a liability insurer, a private sickness fund, a physician association, a patient safety organisation, and an academy of medical sciences.

Stakeholders were contacted by email and suitable dates for an interview were found with those willing to participate. A total of 23 stakeholders agreed to participate in the study. One stakeholder declined to participate due to their workload. Interviews were held between October 2012 and February 2013. One interview was conducted via a Skype video call; all others were conducted in person at a venue of the participants' choosing, typically his or hers private office. Only the participant and the researcher were present during the interview. As

the interviewer [S.M.] was a non-native German and French speaker, all interviewees were given the option to have a translator present. This offer was not taken up and all interviews were conducted in English.

A semi-structured interview guide about nurses' attitudes and experiences with error disclosure and perceived barriers was developed. Questions used to prompt discussion included: Are errors a serious problem in healthcare? What do you see as the main barriers to the communication of medical errors (to patients/colleagues/hospitals) in Switzerland? What measures could promote medical error communication in Switzerland? Based on the first 2 interviews which did not show any problems, we decided that no further piloting or adaptation of the interview guide was necessary. No repeat interviews were carried out. Interviews were audio recorded, no field notes were taken. Interviews lasted an average of 52 minutes. After 23 interviews the question about data saturation arose and was discussed by the research team. It was agreed that concerning the main themes saturation was reached and that no new major discrepancies were coming up during the interviews. In sum, the research team concluded that saturation was reached in the content and attitudes expressed by the participants on the main themes and no other major issues regarding error disclosure were not at least broached. Transcriptions of the interviews were not returned to the participants.

### *Analysis and findings*

Using the interview transcriptions, S.M. performed conventional content analysis,[20] focusing on themes common across participants as well as those unique to individuals that may offer insight into differences in perspectives and discrepancies in practice. Initial themes discovered in the interviews were labelled using a process of open coding (i.e., no specific preconceived codes were identified or used; rather, codes emerged directly from the data).

The other investigators [S.M., D.S., A.L., B.E.] reviewed the initial analysis to clarify and refine codes, and conversations among the investigators continued until coding differences were resolved and consensus was achieved.

### **7.3. Results**

#### *Liability Insurance's Impact on Error Communication*

While all 23 participants were asked about liability insurance, the most in-depth responses regarding this issue came from a minority of participants with a legal or quality background. While the other participants, particularly those who were clinicians, had generally not experienced or were not aware of any interference from liability insurers in terms of open communication with the patients after an error, the participants with a legal or quality background reported a significant negative impact on communication.

In general, it was reported that liability insurance contracts generally prohibit hospitals and physicians from making statements concerning liability before discussing the matter with the insurance company. It is also the insurance company's responsibility to handle the claim and communicate with the patient in relation to this process:

*"I think that is a general provision that not only in medical situations but in general that before giving any statements concerning the liability or even the coverage they need to register the case and talk with us and finally it's our business to do the claims handling. Well, that's in general." P18*

It was acknowledged, however, that communication with the patient regarding the case would often be put on hold while information and expert advice was gathered. In complex cases, this process could take many years.

However, a number of participants reported that the impact of liability insurance contracts on communication between the hospital or doctor and the patient was often much greater in practice than simply not making statements concerning liability. Participants reported that all communication with the patient was often stopped once a claim was made due to instructions given by insurance companies' lawyers, or hospitals and doctors being overly cautious:

*“As soon as a case is announced to the insurance company, usually a lawyer from the insurance company comes and says we take it over, don't say anything to the patient to the patient's lawyer, not even excuses. Now you have to shut your mouth.” P12*

Indeed, a number of participants reported that hospitals and doctors are particularly concerned about losing their liability insurance cover for apologising to harmed patients because of the fear that it will be seen as an admission of fault. There was general agreement among these participants that while liability insurers would not allow apologies that include an acknowledgement of responsibility to be given to patients, expressions of sympathy for what has occurred were not dangerous. However, due to the anxiety about losing liability insurance cover, healthcare providers are often unwilling to apologise to patients at all:

*“There is no debate about the fact you should express regrets from the institution, regrets about what happened, but there is some consensus on the fact that third party liability insurers would not currently cover any hospitals that would plain and bluntly*



*say I'm sorry, and not that I'm sorry for what happened, but I'm sorry for my mistake for instance, there would be no coverage for a hospital where a professional would say something like that. So that's where the caution comes into account." P1*

However, some of these participants felt that inhibiting apologies, and communication in general, after a patient was harmed was unnecessary and has potentially negative outcomes for all involved.

#### *Liability law vs. patient rights law*

One participant felt that in terms of communication after an error there could be a meeting of "two different worlds" which often conflicted: liability law and patient rights law. To illustrate his point, the participant described a recent case where he was representing an injured patient and was confronted by a hospital's liability insurance lawyer, who was trying to limit the exchange of information and communication. The participant reported that he bypassed this using patient rights and went directly to the physician, who was reluctant to speak about (and apologise for) what happened due to the instructions he had received:

*"He received a message from the hospital – you will not speak because there is the liability insurance lawyer taking care of the case. But the law gives my client the right to be in the room and ask to see the doctor. And the doctor received a message from their lawyer, don't speak. So I had to twist the arm behind because the system was not built in a way that they could actually have an open discussion, and that was no good. You see, I think you can have a physiological or sociological analysis, but it's true in a pure legal point of view we had two different worlds meeting, one coming from liability law and one coming from patient rights law." P15*

### *Increasing Flexibility Regarding Error Communication*

Participants identified two different self-insurance approaches that could be taken by hospitals to increase flexibility regarding error communication. Firstly, participants suggested that hospitals could raise their current self-insured retained limits, under which liability insurance does not cover and must be paid for by the insured. This would provide hospitals with more freedom to communicate with harmed patients and resolve the matter directly with them. Participants reported that some hospitals have implemented this approach and are experimenting with how much they can cover themselves.

Second, participants reported that some large public hospitals have decided to move to full self-insurance and not have liability insurance at all.

*“I know of a few hospitals who now have decided not to keep the insurance but to be their own insurer, and to save money every year and to create a fund, and then they pay damages out of their own money. Because they had the feeling that they had more control over the whole process. What they could say to the patient, what they could really discuss....So I know that in a number of public hospitals there is a big discussion now, should we keep civil liability insurance or should we move to another system where we insure ourselves.” P12*

Representatives of one of these hospitals reported that this was done primarily for financial considerations. However, they also noted that this approach also gives them more flexibility in de-escalating patients' demands in the context of civil claims.

#### **7.4. Discussion**

The results of this qualitative study suggest that a conflict exists in Swiss hospitals between the requirements of liability insurance and communication with patients following medical errors. Legal concerns about insurance may be preventing doctors from communicating transparently with patients, which in turn implies that patient rights legislation is not being followed.

With a new ethic of transparency regarding medical errors now prevailing internationally, the nondisclosure of errors is increasingly being perceived to be misguided, being more concerned “about our liability than our humanity.”[21] As Lucian Leape has noted: “We have long known that a serious medical mishap is devastating for the patient, imposing an immense emotional burden on top of the physical suffering and fracturing the trust that is the cornerstone of the doctor-patient relationship. And we know that honesty, transparency and apology are essential to ease that burden and rebuild that trust...”[21] It is also known that medical errors can have a significant impact on clinicians and it is thought that their distress can be exacerbated by nondisclosure.[21]

However, the advice to avoid open communication and apology has not always been completely unwelcomed by clinicians: “It fed into their fears of shame and disgrace and provided cover for avoiding the painful discussion with the patient and the revelation of fallibility.”[21] Indeed, it would be mistaken to think that clinicians’ legal fears are the only reason for errors not being disclosed. While legal fears may surely be a factor in clinicians’ reluctance to disclose and apologise for errors, the true reasons are usually more complex, including a professional and organizational culture of secrecy and blame, clinicians lacking confidence in their communication skills, and the shame and humiliation associated with

acknowledging a harm causing mistake — to oneself, one’s patient, and one’s peers.[6] Indeed, research published in 2006 involving US and Canadian physicians suggest that the legal environment may have a more limited impact on physicians’ communication attitudes and practices regarding adverse events than often believed, and that the culture of medicine itself may be a more important barrier.[22]

Nevertheless, it is clear that communication after an error is often inhibited by liability insurance companies due to fears that it will increase litigation and costs. However, the experience of a number of organisations internationally indicates that adoption of disclosure and apology practices may in fact markedly reduce litigation and legal costs.[23-24] However, it is difficult to know how much of the success achieved at these organisations “is related to the practice of open disclosure and how much might be related to their proactive approach of offering early compensation.”[21] Indeed, it remains unclear what the overall impact of wide-spread disclosure and apology practices would be on malpractice litigation. Some researchers have referred to “the great unlitigated reservoir” and have warned that such practices may actually significantly increase lawsuits and costs.[25]

It is widely agreed, however, that disclosing medical errors and apologising to harmed patients is the ethical thing to do, regardless of whether it decreases or increases the incidence of litigation.[3] Indeed, the disclosure of errors has evolved over the past two decades internationally from a strategic response to rising legal costs focusing on organisational risk minimisation, to an ethical practice seeking to re-establish trust by meeting patients’ needs and expectations following an error.

While disclosure cannot be done in isolation and has to be integrated into risk management and liability insurance programs,[21] the reported current practice of at least some liability insurance companies in Switzerland of inhibiting hospitals and clinicians from communicating with harmed patients after an error is concerning and requires further investigation.

Participants identified two different self-insurance approaches that could be taken by hospitals to increase flexibility regarding error communication: 1) hospitals could raise their current self-insured retained limits, or, 2) hospitals could move to full self-insurance and not have liability insurance at all. The fact that some large public hospitals have decided to not have liability insurance, and others are currently considering this option, may suggest that there is dissatisfaction among some Swiss hospitals with the service liability insurance companies are currently providing. Indeed, an article in the May 2011 issue of *Gesundheitstipp* entitled “*Hospital liability: Little benefit - despite high premiums*” noted that “the satisfaction of the hospitals [regarding liability insurance] is crumbling. The Lausanne Universitätsspital Chuv terminated its liability insurance three years ago.”[26] Furthermore, it was reported that as insurance companies usually only pay when there is no alternative, patients are often forced to go to court, though few can afford this. Margrit Kessler, President of the Stiftung SPO Patientenschutz, therefore felt that the move away from liability insurance was not only better for hospitals as it saved them money, but also for patients: “Although the Canton of Vaud no longer has liability insurance, the compensation of patients works better there than in other Cantons. In case of an error, the Chuv pays for follow ups as well as compensation without any grumbling.”[26] Both of the options identified by participants may therefore not only save hospitals money on insurance premiums, but also improve the situation for patients by allowing hospitals to pursue disclosure and apology programs, and early compensation

programs. It remains to be seen, however, if the majority of Swiss hospitals have the desire, and courage, to pursue such programs. However, it should be noted that even if hospitals move away from liability insurance, physicians in the private sector will still be under an obligation on to have their own liability insurance, due to Article 40h of the Swiss Medical Professions Law.

It is therefore interesting to note that internationally, legislation has been widely enacted in the United States (36 states and the District of Columbia), Australia (all 8 states and territories), and Canada (8 out of 10 provinces and 2 out of 3 territories) to prevent “apologies” given after an “incident” from being used in various legal processes.[26-29] A number of these apology laws also specifically address the issue of liability insurance. For instance, legislation in Canada states that an apology “does not, despite any wording to the contrary in any contract of insurance and despite any other enactment, void, impair or otherwise affect any insurance coverage that is available, or that would, but for the apology, be available, to the person in connection with that matter.”[30] While some international legal scholars have questioned the need for apology laws in general, they have acknowledged that these particular provisions regarding liability insurance may be a good idea if these fears are found to be justified.[31]

An example that may be more relevant for Switzerland is the 2008 addition in Germany of section 105 of the Insurance Contract Law Act (Versicherungsvertragsgesetz), which provides that insurance agreements that include “cooperation clauses” are now invalid. In principle, German clinicians are now free to speak to patients about the incident, give them a report of the facts, and express regret, and may also accept liability without losing their insurance cover.[32] Further research is needed in Switzerland to establish whether the loss of liability

insurance coverage for apologising to harmed patients is a significant enough issue to warrant the implementation of such legal protection.

### *Limitations*

This was a qualitative study that did not aim at collecting statistically representative data. It was carried out in one European Country. However, given the international network of liability insurances, it is likely that a similar influence on medical error communication exists in other European countries. Although we have no proof that our interviewees have correctly described the reality there is no particular reason to doubt that their perceptions describe a significant part of the reality in Switzerland. Indeed, the fact that we interviewed experts from different fields that have experience with medical errors makes it likely that we captured at least some part of the reality viewed from different sides. A bias might exist towards the reporting of socially desirable attitudes. Given our results that are rather critical of current practice, we believe that such a bias is unlikely to be of significant size. The fact that many medical interviewees were not aware of any influence of liability insurance on the communication of medical errors can be interpreted as a limitation. At the same time, this is an important finding and should motivate further studies in this field.

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# **CHAPTER 8: NURSES' PERSPECTIVES REGARDING THE DISCLOSURE OF ERRORS TO PATIENTS: A QUALITATIVE STUDY**

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## **Abstract**

**Background:** There is often a mismatch between patients' desire to be informed about errors and clinical reality. In closing the "disclosure gap" an understanding of the views of all members of the healthcare team regarding errors and their disclosure to patients is needed. However, international research on nurses' views regarding this issue is currently limited.

**Objectives:** Explore nurses' attitudes and experiences concerning disclosing errors to patients and perceived barriers to disclosure.

**Design:** Inductive, exploratory study employing semi-structured interviews with participants, followed by conventional content analysis in which investigators read and discussed transcribed data to identify important themes.

**Settings:** Nursing departments from hospitals in two German-speaking cantons in Switzerland.

**Participants:** Purposive sample of 18 nurses from a range of fields, positions in organisational hierarchy, work experience, hospitals, and religious perspectives.

**Methods:** Data were collected via individual, face-to-face interviews using a researcher-developed semi-structured interview guide. Interviews were transcribed in German and analysed using the qualitative data analysis software package Atlas-Ti (Berlin) and conventional content analysis. The most illustrative quotes were translated into English.

**Results:** Nurses generally thought that patients should be informed about every error, but only a very few nurses actually reported disclosing errors in practice. Indeed, many nurses reported that most errors are not disclosed to the patient. Nurses identified a number of barriers to error disclosure that have already been reported in the literature among all clinicians, such as legal consequences and the fear of losing patients' trust. However, nurses in this study more frequently reported personal characteristics and a lack of guidance from the organisation as barriers to disclosure. Both issues suggest the need for a systematic

institutional approach to error disclosure in which the decision to inform the patient stems from within the organisation and is not shouldered by individual nurses alone.

**Conclusions:** Our study suggests that hospitals need to do more to support and train nurses in relation to error disclosure. Such measures as hospitals establishing a disclosure support system, providing background disclosure education, ensuring that disclosure coaching is available at all times, and providing emotional support for all parties involved, would likely go a long way to address the barriers identified by nurses.

## **8.1. Introduction**

While there has been a dramatic change in the approach to medical errors internationally over the last decade, with a new ethic of transparency replacing the traditional customs of secrecy and denial, there remains a large “disclosure gap” between patients’ preferences to be told about errors and current practice (Gallagher and Lucas, 2005). International studies examining clinicians’ views regarding error disclosure have consistently found a number of barriers that contribute to nondisclosure, including legal fears, a professional and organisational culture of secrecy and blame, clinicians lacking confidence in their communication skills, clinicians fearing that patients will experience distress, and doubt about the efficacy and effectiveness of disclosure (Iedema et al., 2011; O’Connor et al., 2010).

The disclosure of errors to patients has tended to have been conceptualised as occurring primarily in the physician-patient dyad, and previous international research on the issue has mainly focused on physicians’ and patients’ attitudes and experiences (Shannon et al., 2009). Healthcare, however, “is delivered by interprofessional teams, in which nurses share in the culpability for errors, and hence, in responsibility for disclosure” (Shannon et al., 2009, 5). Indeed, there is growing evidence that patients and families actually prefer to have an interprofessional approach to disclosure (Iedema et al., 2008). In addressing the “disclosure gap” an understanding of the views of all members of the healthcare team is needed. International research on nurses’ views regarding errors and disclosing errors to patients, however, is currently limited (O’Connor et al., 2010; Shannon et al., 2009).

Shannon and colleagues’ 2009 focus group study conducted in the United States was one of the first to systematically explore nurses’ attitudes and experiences regarding error disclosure to patients (Shannon et al., 2009). The study indicated that nurses routinely independently

disclose nursing errors that did not involve serious harm, but believed that the disclosure of serious harm was the responsibility of the attending physician. While nurses wanted to be involved in the disclosure process, both as a professional courtesy and to enable them to communicate more honestly with patients about the error that had occurred, nurses were usually not involved in the discussion among the team to plan for the disclosure or in the actual disclosure, which could place them in ethically compromising situations (Shannon et al., 2009).

Similarly, Hobgood and colleagues' 2006 survey of U.S. emergency medicine providers (physicians, nurses and out of hospital providers) found that nurses were less likely to disclose errors to patients than physicians (59% versus 71%) (Hobgood et al., 2006). Jeffs and colleagues' qualitative study in 2011 also found that Canadian nurses perceived their role in team-based error disclosure as secondary and as balancing professional boundaries, but also reported frustration and distress when not fully involved (Jeffs et al., 2011). However, in 2010, Jeffs and colleagues explored Canadian nurses' (as well as physicians' and surgeons') perceptions of team-based error disclosure using an educational simulation intervention through qualitative interviews (Jeffs et al., 2010). Participants' views revealed a tension between team-based error disclosure as an unrealistic, forced practice and as a realistic, beneficial endeavour. The authors concluded that "a team-based approach to disclosure is not realistic or necessary for all error situations...[h]owever, when the error involves a variety of health care professionals interacting with the patient, a team-based approach is beneficial to them and the patient" (Jeffs et al., 2010, i57). Additionally, Brazilian nurses' perceptions and general attitudes towards adverse events were examined through qualitative interviews by Freitas and colleagues in 2011. Nurses thought that decisions regarding the communication of adverse events were determined by the severity of the error (Freitas et al., 2011).

Research on this issue in Continental Europe, however, is particularly limited. In a 2004 survey study in Denmark, Andersen and colleagues found significant differences between what patients want after an adverse event and what nurses and doctors believe that patients want (Andersen et al., 2004). For instance, both professional groups underestimated the extent to which patients desire an admission of error from the staff involved. While 60% of patients thought it was exceptionally important that they are informed about errors, only 32% of nurses and 28% of doctors believed that patients would think it is exceptionally important (Andersen et al., 2004).

Nurses' views concerning disclosing errors to patients remain poorly understood, particularly in Continental Europe. This represents a potential obstacle to efforts to improve error communication. This study therefore seeks to advance our understanding regarding nurses' attitudes and experiences concerning disclosing errors to patients and perceived barriers to disclosure.

## **8.2. Methods**

The methods of the study are presented in accordance with the "Consolidated criteria for reporting qualitative research" (COREQ) (Tong et al., 2007).

### *Research team and reflexivity*

Interviews were conducted by M.D., a male medical student, who had limited previous experience in qualitative research. He had received the usual training offered for medical students to prepare their medical master's thesis. No relationship was established between M.D. and the participants prior to the study, and participants received limited information about M.D. There was no hierarchical relationship between MD and the study participants and



we are not aware of any particular biases of M.D. concerning the research topic. S.M. has previous training and experience in qualitative research (McLennan and Elger, 2014), L.E.R. is experienced in computer-aided qualitative data analysis, and B.E. has a longstanding experience with qualitative studies (Ritter and Elger, 2013; Wangmo, T., Handtke, V., Elger, B.S., 2014; Wangmo et al., 2014).

### *Study design*

The theoretical framework employed in this study was conventional content analysis (Hsieh and Shannon, 2005). We primarily selected participants through purposive sampling, in order to ensure that participants were from different backgrounds and to capture a variety of experiences. We sought nurses from a range of fields, positions in organisational hierarchy, work experience, hospitals, and religious perspectives. We also identified additional participants using a snowball approach, particularly through well-connected interviewees.

We approached the heads of several nursing departments from hospitals of various sizes and types in two German-speaking cantons in Switzerland in February 2012 via email or telephone. We then asked those willing to participate to name possible interviewees. Suggested participants were contacted via email with information regarding the interviews, anonymity and our institute. A total of 18 nurses agreed to participate in the study. One nursing department refused to participate; no reasons were provided other than they were not interested. No participants dropped out of the study. Interviews were held between February and May 2012. We offered to all participants that the interview be held in a private office of a university library close to the hospitals. Approximately half of the participants chose this option, while the other half chose to be interviewed in their respective hospitals, typically on

their own ward, in a private room. Only the participant and the researcher were present during the interview.

A semi-structured interview guide about nurses' attitudes and experiences with error disclosure and perceived barriers was developed. At the beginning of the interview, we provided nurses with definitions of errors that are well-established in the literature (Gallagher et al., 2006). Questions used to prompt discussion in the semi-structured conversations included: Are errors a serious problem in nursing? Are errors usually caused by failures of the health care delivery system or by failures of individuals? Have you received training regarding error disclosure? Should errors (near misses, minor errors and serious errors) be disclosed to the patient? What barriers do you see for error disclosure? Based on the first 2 interviews which did not show any problems, we decided that no further piloting or adaptation of the interview guide was necessary. No repeat interviews were carried out. Interviews were audio recorded and M.D. made written field notes of key issues that arose during the interview. Interviews lasted an average of 35 minutes. After 18 interviews the question about data saturation arose and was discussed by the research team. It was agreed that concerning the main themes saturation was reached and that no new major discrepancies were coming up during the interviews. In sum, the research team concluded that saturation was reached in the content and attitudes expressed by the participants on the main themes and no other major issues regarding error disclosure were not at least broached. Transcriptions of the interviews were not returned to the participants.

Interviews were conducted in Alemannic German or High German, depending on the participant's preference. We transcribed all recordings verbatim using High German diction to make texts consistent as dialects are diverse and there is no standard diction with adequate

comprehension. Language barriers between researchers and participants can present significant methodological challenges, and Squires (2009) has identified a number of recommendations for cross-language qualitative research. Our approach largely fulfilled these recommendations. *Conceptual Equivalence*: Participants were able to talk in their native language and common terms were provided at the beginning of the interviews. Translations were not validated externally. *Translator Credentials*: M.D., the interviewer and translator, is a German native speaker and has worked as a German language teacher in Switzerland (specialising in the particular differences in German dialects) and, as a medical student, also shared to a large extent the professional language of participants. *Translator's Role*: M.D. conducted and transcribed the interviews, translating from Alemannic German into High German where necessary. Analysis was done on the High German transcription. *Methods*: All participants came from a linguistically homogeneous area, in which both Alemannic and High German are omnipresent in their professional environment, and were able to discuss their thoughts in their preferred idiom.

### *Analysis and findings*

Using the interview transcriptions and the qualitative data analysis software package Atlas-Ti (Berlin), M.D. performed conventional content analysis (Hsieh and Shannon, 2005), focusing on themes common across participants as well as those unique to individuals that may offer insight into differences in perspectives and discrepancies in practice. Initial themes discovered in the interviews were labelled using a process of open coding (i.e., no specific preconceived codes were identified or used; rather, codes emerged directly from the data). The other investigators [S.M., L.E.R., B.E.] reviewed the initial analysis to clarify and refine codes, and conversations among the investigators continued until coding differences were resolved and

consensus was achieved. The completed master's thesis was provided to the participants. A number of participants replied with only positive and supportive feedback.

### **8.3. Results**

#### *Characteristics of Respondents*

.Of the 18 nurses interviewed, 17 were female. Participants' work experience ranged from 4 to 35 years (mean 20.7), and they had been employed by their current hospital for 2 to 35 years (mean 17.5). They worked in nine different specialties (internal medicine, surgery, intensive care, oncology, haematology, obstetrics and gynaecology, neurology, paediatrics and geriatrics) and held various hierarchical positions. For this reason, only ten of the nurses spent more than half of their working time with patients directly. Two interviewees reported that they only worked administratively (**Table 1**).

#### *Attitudes and Experiences Concerning Disclosing Errors to Patients*

With regards to whether errors should be disclosed to the patient, most nurses made a distinction between the ideal and the actual situation. In general, nurses stated that patients should be informed about every error, a position grounded on a principle of transparency or trust. However, only a very few nurses actually reported disclosing errors in practice. Indeed, many nurses reported that most errors are not disclosed to the patient: *"Honestly, no, I don't think so. Most errors are not communicated to the patient"* N6

However, among those nurses who had experienced disclosing errors, a substantial number of them on reflection reported, often with some surprise, that this had actually increased the patients' trust. As one nurse explained: *"That is why we always go back and inform the*

*patient. And we also always tell them exactly what we do next, so that the error does not happen again. The same applies also for the relatives. So far this has always gone well. And when people lose confidence because of an error: this is not even happening to me now. On the contrary, when...we notice something and we go and tell them, this is rather considered a mark of confidence” N9*

Nurses often implicitly perceived error disclosure as being primarily the physician’s duty due to team hierarchies. . However, it was reported that errors could be “camouflaged” by both doctors and nurses. Moreover this behaviour was said to concern both minor and serious errors: *“If I think it could have been a serious error that might have caused this damage to the patient, it will be explained differently or in a way the patient cannot realise” N6*

While nurses thought that near misses should be reported to the team so processes could be analysed to identify opportunities to improve the quality of care, none of the nurses interviewed advocated disclosing near misses to patients. It was often thought that the need for communication starts when the patient is affected. For others, the threshold for disclosure was dependent on how the severity of damage caused by the error was perceived by staff: *“In general, the patient clearly has the right [to be informed], whether it is a small or a big error. But when errors happen that have no effect on the patient, when nothing happens - small errors that have no effect, or the patient would not see the error as an error - then we would not tell” P7*

Nurses stated they would inevitably disclose errors which significantly impaired the patient, but that there was often disagreement within the team at how to evaluate this significance. Nurses also reported that decisions regarding disclosure can also be affected by the type of

patient involved. Nurses felt that disclosure should ideally be accordance with the patient's will and often perceived signals not to inform particular patients in detail: *"You perceive this when dealing with patients; there are people who prefer not to know. And you need to somehow develop a sure instinct not to burden them"* N8

Most nurses reported that they had not received specific training explicitly in relation to the disclosure of errors to patients. However, many nurses reported having completed general courses on communication in difficult situations at various stages of their education. While some of these courses were said to cover disclosure techniques, they did so only subordinately. Most nurses, however, expressed a distinct need for more education on this issue: *"Communication is already a major focus in our training. But how do you do that when you have committed an error? This is not precise I believe. It has never been substantiated. I think that's strange and uncomfortable for everybody"* N7

### *Barriers to Disclosure*

Nurses reported a range of barriers to error disclosure which related to difficulties in defining errors, individual personality and fears, organisational considerations and patient characteristics.

A number of nurses reported that a barrier to disclosure was that it is sometimes difficult to even know if an error has occurred. As one nurse explained: *"Moreover, it is often hard to tell what really is an error. There are also many complications that you might have foreseen – maybe not. It is difficult to define. You cannot say: there is something happening that is wrong"* N1

It was also often called a matter of personal character whether or not someone would disclose an error. Various traits were seen to inhibit disclosure, including shame, a focus on self-protection, and a lack of self-awareness and self-confidence: *“A matter of character. How does one approach this incident and come to terms with it. I think this is the first decisive point: will one disclose it at all or not...The person concerned will always think of themselves first” N7*

Many nurses named various personal fears as potential barriers. Some were afraid of losing the patients’ trust or causing patients distress when they are already in a complex situation. Fears of punishment or legal consequences were seen by some nurses as a barrier to error disclosure, while others explicitly said that they did not to consider the legal consequences when dealing with errors: *“The common working culture can be beneficial or also hindering. For example if you have to fear reprisal once you disclose an error, that this falls back on a person who is then ostracised or even loses their job” N13*

A number of organisational considerations were identified by nurses as obstacles to being open about errors to patients. Most often mentioned as a barrier was a missing open culture in the organisation concerning errors as well as a lack of guidance from policies or heads of department. Nurses reported that their clinical schedule could mean a lack of time for extensive disclosure and that if errors have to be explained by staff in a different shift or department this could lead to denials. The risk of discrediting their hospital or department was named as another reason by nurses to cover up cases. Nurses saw penalties and sanctions as clearly counterproductive in identifying and responding to errors, but a number had witnessed such consequences in relation to colleagues.

Finally, certain patients were reported to evoke concealment of errors. Nurses reported that if the patient was post-narcotic, mildly confused or had other forms of cognitive impairment then they would hesitate to disclose an error to him or her. Furthermore, nurses reported that other factors such as aggressive or demanding behaviour from patients and language barriers could cause insufficient information being provided after an error: *“Persons who speak clearly and German and have a confident appearance and always know what they want will be treated completely different from families who do not speak German or ask, but just wait”*

N18



**Table 1.** Characteristics of the Respondents

Characteristic	N (%)
Female	17 (94)
Years in practice <sup>1</sup>	20.7 (4-35)
Years at hospital <sup>1</sup>	17.5 (2-35)
Position	
Nursing expert	2 (11)
Director of nursing department	3 (17)
Head of ward	5 (28)
Ward nurse	8 (44)
% Of time in direct patient contact	
0	2 (11)
1-25	2 (11)
26-50	4 (22)
51-75	5 (28)
76-100	5 (28)

<sup>1</sup> Data are given as mean (year range).

#### **8.4. Discussion**

To our knowledge, this is the first time that qualitative interviews have been used in Europe to explore nurses' attitudes and experiences concerning disclosing errors to patients. Nurses generally thought that patients should be informed about every error, but only a very few nurses actually reported disclosing errors in practice. Indeed, many nurses reported that most errors are not disclosed to the patient. Nurses identified a number of barriers to error disclosure that have already been reported in the literature among all clinicians, such as legal consequences and the fear of losing patients' trust. However, nurses in this study more frequently reported personal characteristics and a lack of guidance from the organisation as barriers to disclosure.

It is well known that there is a mismatch between patients' desire for disclosure of errors and clinical reality; with clinicians typically endorsing disclosure in principle but often do not share information in practice (Gallagher and Lucus, 2005). This applied to our sample as well. While it is encouraging that nurses recognised patients' right to be informed about errors that occur in their care, a majority thought that many errors were concealed from patients. This is concerning as there is an ethical responsibility to maintain honest communication with patients and their families even in cases of errors, and studies conducted internationally have indicated that patients are virtually unanimous in wanting all harmful errors disclosed (Gallagher et al., 2003; Iedema et al., 2008).

Nurses identified a number of barriers to error disclosure that have already been reported in the literature (Iedema et al., 2011; O'Connor et al., 2010). However, while some nurses did report legal consequences and the fear of losing patients' trust as a barrier, many reported just the opposite. Many nurses explicitly said they were not concerned about legal consequences

and most of those who had previously disclosed an error reported that it had enhanced the patient's trust. Nurses have a key role in creating trustful environments in healthcare and previous studies have reported an "error-trust" relation among nurses. Schwappach and colleagues, for instance, examined oncology nurses' perceptions about involving patients in the prevention of chemotherapy administration errors in 2010 (Schwappach et al., 2010). It was found that nurses were very positive about involving patients in safety and this was seen to be compatible with trustful relationships.

Nurses in this study, however, were more likely to report that personal characteristics and a lack of guidance from the organisation as barriers to disclosure. Both issues suggest the need for a systematic institutional approach to error disclosure in which the decision to inform the patient stems from within the organisation and is not shouldered by individual nurses alone. Disclosing an error to a patient is one of the most complex and difficult conversations that occurs in healthcare and the need to support and train clinicians in relation to this process has been widely recognised internationally (Gallagher et al., 2007; Canadian Patient Safety Institute, 2008; Truog et al., 2010; Australian Commission on Safety and Quality in Health Care, 2013).

While hospitals in a number of countries are known to have developed comprehensive disclosure support systems and are often required to have an error disclosure policy as a part of accreditation (Truog et al., 2010), little is known about the situation in Continental Europe. However, it appears that many European hospitals are under no obligation to have disclosure policies and policies and support systems are often lacking. For instance, a recent Swiss survey found that only 46% of responding hospitals currently have a disclosure policy

(McLennan et al., 2013), while a German survey found that only 22% of responding hospitals currently have a policy (Lauterberg et al., 2012).

This shortage of guidance and support in relation to error disclosure is likely to be exacerbated by nurses' lack of disclosure training. Indeed, Jeffs and colleagues have previously suggested that nurses' minimal involvement in the disclosure process "may be a result of limited disclosure training, which renders them unprepared for engaging in difficult conversations with each other and with patients" (Jeffs et al., 2011, 321). However, given the large number of clinicians who could be involved in a serious medical error at any time, there are difficulties involved in training all of them to be able to hold these discussions well and any moment. In light of this challenge, the Harvard hospitals decided "to endorse an approach that would assure the "just-in-time" availability of expertise and help by concentrating our educational efforts on a small number of disclosure "coaches" who would be available to all clinicians within the institution on a 24/7 basis" (Truog et al., 2010, 59). In nursing, Shannon and colleagues have previously proposed a similar approach in suggesting that nurse managers could be trained to coach disclosure in their team (Shannon et al., 2009).

### *Limitations*

This study has some limitations. Participating nurses came from hospitals situated in just two German speaking Swiss cantons. However, the percentage of nurses who come from adjacent European countries is known to be considerable in the two cantons. We therefore have reasons to believe that our sample represents a variety of views that go beyond a typical "Swiss" culture. We cannot exclude that results might vary from those in other parts of the country with different regional culture. Coding, however, showed a reasonable variety compared to findings from the United States and Canada. The translation of all interviews into

High German dictation may have affected results by causing a loss of meaning. However, as participants were able to talk in their native language and idiomatic phrasing was kept wherever possible, with only minor grammatical adaptations being made, we think any affect will be minor. As sampling was done purposefully and by recommendations from the nursing administration our study might be biased towards the opinions of explicitly committed nurses. No interviewee reported having personally committed a serious error however a few said they had witnessed a serious error by a colleague. Additionally, only one male nurse was included. Although this mirrors the female dominance in the profession and the fact that serious errors remain infrequent, limitations of our study could be that perceptions triggered by a specifically masculine socialization and drastic individual experiences, respectively, may be underrepresented. As is in all interview studies, there is a bias towards the reporting of socially desirable attitudes. Many of our results, however, do not reflect socially desirable attitudes, such as the findings that patients are often not informed. This is a sign that we were able to ensure confidentiality, generate trust, and obtain authentic responses that should be taken seriously.

### *Conclusion*

In closing the “disclosure gap” efforts are required to address barriers to disclosure. Our study suggests that Swiss hospitals need to do more to support nurses in relation to error disclosure and that training regarding this process is also necessary and desired by nurses. More research is needed in Switzerland (and Continental Europe in general) on what exactly is needed in relation to these issues. However, European organisation may be able to use the experiences of countries more advanced on these issues as a guide to developing and implementing their own systems. For instance, the National Quality Forum (NQF) in the United States has recommended that hospitals should: establish a disclosure support system, provide

background disclosure education, ensure that disclosure coaching is available at all times, and provide emotional support for all parties involved (Gallagher et al., 2007). Such measures would likely go a long way to address the barriers identified by nurses in this study. Nurses in this study often implicitly perceived disclosure as being the duty of the doctor. Further research, however, is needed in relation to the role of nurses in the disclosure process vis-à-vis physicians. Previous research in the United States and Canada has found that nurses generally lack involvement in the disclosure process (Shannon et al., 2009; Jeffs et al., 2011). Jeffs and colleagues (2011) note that this subject relates to well-understood issues of power and hierarchy within healthcare teams. However, when errors occur in which nurses have been involved in some way, it will likely be beneficial to all parties if nurses are involved in the disclosure process. An understanding of how this can best be achieved in European countries would be helpful.

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## **MEDICAL ERROR COMMUNICATION INTERNATIONALLY**

# CHAPTER 9: REGULATING OPEN DISCLOSURE: A GERMAN PERSPECTIVE

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## **Abstract**

The issue of open disclosure has received growing attention from policy makers, legal experts and academic researchers, predominantly in a number of English speaking countries. While implementing open disclosure in practice is still an on-going process, open disclosure now forms an integral part of health policy in various American states, the United Kingdom, Canada, Australia, and New Zealand, with a number of measures having been put in place to encourage open disclosure and to mitigate some of the barriers to such open communication. In contrast, this issue has received little attention in non-English speaking countries and there is currently no empirical data relating to actual practice or practitioners' attitudes and views in most countries in continental Europe. This article critically examines Germany's current approach to open disclosure. It finds that the issue plays no significant role in German health policy with very limited measures explicitly concerning such communication currently in place. While a number of aspects of the wider regulatory framework appear to be supportive, Germany is still in the early stages of a systematic approach and additional measures are required to further promote open disclosure within the self-governing German healthcare system. This exploration provides an example of a non-English speaking country's approach to open disclosure and may be of particular interest to neighbouring German-speaking and civil law countries such as Switzerland and Austria.

Open disclosure is the prompt, compassionate, and honest communication with patients and families following a healthcare incident that has resulted in harm. [1-3] While the open disclosure process can vary, it typically includes: an acknowledgment; an expression of regret or an apology; an investigation into the incident; providing a factual explanation of what happened; and explaining the steps being taken to manage the incident and prevent recurrence.[1, 2] The issue has received growing attention from policy makers, legal experts and academic researchers, predominantly in a number of English speaking countries.

### **9.1. The development of open disclosure**

The practice of maintaining “a humanistic, care-giving attitude with those who had been harmed, rather than respond[ing] in a defensive and adversarial manner” was first articulated at Montreal Hospital.[4] Soon after this in 1989, Dr Steve Kraman, faced with a highly litigious environment and rising legal costs, began openly sharing incident information at the Veteran Affairs Hospital in Lexington. This approach not only led to a significant reduction in complaints and legal costs, but has improved collaboration within the healthcare relationship. [5,6] Similarly, Rick Boothman has achieved impressive results with disclosure in a very challenging legal environment at the Michigan Health Centre. [7]

The disclosure of healthcare incidents, however, has evolved over the past two decades from a strategic response to rising legal costs focusing on organisational risk minimisation, to an ethical practice seeking to re-establish trust by meeting patients’ needs and expectations following an incident and to improve the quality of care. The Massachusetts Coalition for the Prevention of Medical Errors’ 2006 document ‘*When Things Go Wrong*’, for instance, was explicit in privileging ethical considerations over legal, financial and reputational issues.[3]

## **9.2. Barriers to open disclosure**

There is, however, currently a large divergence between patients' preferences to be told about healthcare errors and current practice. While health practitioners typically endorse disclosure in principle, they often do not share information in practice, with studies suggesting that as few as 30% of harmful errors are disclosed to patients.[8]

The most often cited barrier to open and honest communication following an incident is the fear of legal liability – that communication may lead to a lawsuit against them, a lack of legal protection when providing information and apologies, and the potential loss of liability insurance if they say too much or the wrong thing.[8,9]

Legal concerns, however, are not the only factor that may lead practitioners not to disclose incidents. Indeed, such concerns can often disguise deeper emotional fears. John Banja, for instance, has argued that a harm-causing error can be such an assault to the practitioner's sense of competency and adequacy that various protective, self-regarding, and defensive psychological responses can be triggered which can often lead to open communication being avoided altogether or conducted inadequately.[9]

## **9.3. Regulating open disclosure**

Open disclosure now forms an integral part of health legislation and policy in a number of English speaking countries, with various measures having been put in place to encourage disclosure and mitigate some of the barriers to such communication – a reflection also of the increasing focus on the systems approach to errors in healthcare.[10]

Governmental and organisational standards and policies have been developed to promote a clear and consistent approach to open disclosure in various American states,[11] the United Kingdom,[1] Canada,[12] Australia,[2] and New Zealand.[13] A number of American states have also implemented specific “disclosure laws” which mandate disclosure in certain circumstances, and “apology laws” to protect the communication from being used in a legal action as proof of the practitioner’s negligence.[14] In addition, professional organisations’ ethics standards in these countries often explicitly endorse open disclosure.[9]

Such measures are, of course, no panacea; there remains a challenge of translating statements of principle into practice, which is an on-going process in these countries. However, such interventions can play an important role in influencing professional, national and organisational cultures, which have a significant effect on the practice, values and individual attitudes in a workplace. While these cultures are dynamic, they also have considerable inertia which requires both strong interventions and time to change. [15]

Indeed, research in these English speaking countries suggests that these measures are making a difference. Rick Iedema and his team in Australia, for instance, have found that the disclosure of incidents is becoming more frequent and that one of the driving forces behind this change has been state and health provider policies, along with the increase of specially trained staff.[16]

#### **9.4. Open disclosure in Germany**

In contrast to the English speaking countries described above, the issue of open disclosure currently plays no significant role in German health policy. While the importance of reporting incidents as part of quality improvement programmes has been recognised, lacking from the

ongoing discussion has been the emphasis of the needs of patients in such situations. Although there was a factorial survey of the general public regarding medical errors in 2004,[17] there is currently no empirical data relating to patients' or practitioners' attitudes and views regarding open disclosure, and very little is known about current practice. Indeed, open disclosure has not yet received a lot of attention in non-English speaking countries in general. There is, for instance, currently no empirical data relating to actual practice or patients' and practitioners' attitudes and views in most countries in continental Europe.

### *Wider Context*

Before examining open disclosure in Germany it is helpful to have an understanding of the wider context in which this discussion is situated.

While commentators agree that a US-style malpractice crisis has not occurred in Germany, and is unlikely to do so, the increase in malpractice litigation is an issue of concern. [18] The increase of litigation began reasonably early in Germany, with approximately 6000 claims a year already being made by the end of the 1970s (compared to the 500 claims a year in England estimated by the Pearson report in the mid-1970s). The current figure is estimated to be around 20,000 to 35,000 (a recent study suggests around 6000 claims a year are made in England). The average cost of claims in Germany, including those settled or abandoned, also trebled between 1981 and 2001, and in some specialities like gynaecology the increase has been six-fold. [18] The associated increase in liability insurance premiums for health professionals has received growing attention [19]

It was in response to the increase in malpractice cases and a growing climate of distrust between doctors and patients that had emerged, that led to the Expert Commissions and



Arbitration Boards (*Gutachterkommissionen und Schlichtungsstellen*) being established in 1975 by the State Medical Associations (*Landesärztekammern*). This process provides free expert appraisal and extrajudicial conciliation where all parties consent to proceedings. The use of this mechanism has steadily increased over time, with a quarter of all suspected cases of medical liability now being assessed by the Expert Commissions and Arbitration Boards, and their non-binding decisions enjoy high acceptance rates (approximately 90% of all cases settled).[20] While data from the Expert Commissions and Arbitration Boards is pooled in the national Medical Error Reporting System (MERS) for systematic learning, the adversarial proceedings themselves are focused on establishing whether or not there is a medical error for which the practitioner is liable to pay compensation.

It also appears that many German hospitals are currently not taking a systematic approach to medical errors. In 2010, the University of Bonn's Institute for Patient Safety conducted the first detailed national survey concerning the implementation status of clinical risk management in German hospitals. The survey was sent to all 1820 German hospitals with 50 beds or more and had a total of 484 respondents. The results showed that clinical risk management and issues of patient safety were an integral part of the agendas for the meetings of the hospital management in only 39% of respondents, and staff were regularly offered training in clinical risk management in only 25% of respondents.[21]

### *Current Measures*

There are currently very limited measures explicitly concerning open disclosure in place in Germany. There are no governmental (federal or state) laws or policies relating to open disclosure. It also appears that the majority of German healthcare organisations do not have any internal standards concerning communication with patients and families following an

error. The survey conducted by the University of Bonn included a question asking whether there is an internal hospital standard which ensures that patients or their relatives are informed of serious medical errors resulting in damage promptly and receive an offer of support. Only 22% of respondents currently have such a standard; 21% have no standard but plan to develop one; the remaining 57% have no standard and have no plans to develop one.[21]

There is also currently no mention of open disclosure in the Federal Medical Association's (*Bundesärztekammer*) (Model) Professional Code of Conduct, nor in the derived Professional Codes of Conduct of the State Medical Associations (*Landesärztekammern*).

Thomeczek et al. have argued,[22] however, that the wider legal framework that exists in Germany is generally supportive of communication with the patient after an incident. Indeed, unlike the situation in most English speaking countries, the healthcare relationship under German law is almost invariably a contractual one,[18] and the treatment contract places obligations on healthcare providers to inform patients of incidents and complications during the course of treatment. However, the predominant view is that there is no legal obligation on the doctor to inform the patient that they were at fault for the incident or complication.[22]

In 2008, section 105 of the *Insurance Contract Law Act (Versicherungsvertragsgesetz)*, was added to provide that insurance agreements that include “non-cooperation” clauses, which releases the insurance company from its obligation to pay costs if liability is admitted without prior consent, are now invalid.

In principle, practitioners are now free to speak to patients about the incident, give them a report of the facts, and express regret, and may also accept liability without losing their insurance cover.[22] However, if the practitioner accepts liability for an incident, they may

have to prove to their liability insurer that this claim was valid to be covered. Legal commentaries therefore recommend that practitioners do not rely on section 105 without speaking to their insurance company prior to disclosing incidents to patients.[23] Unfortunately, it appears there is currently no consistent approach to this dilemma by the liability insurers, therefore denying practitioners legal security.

The legal dilemma is exemplified in a brochure for practitioners by the German Medical Insurance (*Deutsche Ärzteversicherung*) that is entitled “Tips for proper behaviour in a liability claim”.[24] While the publication encourages practitioners to speak to the patient as soon as possible following an incident, to take the patient’s concerns seriously, and to be empathic and compassionate, it also cautions the practitioner not to accept any liability, as this could risk their insurance cover.

A positive step forward, however, has been the recent publication by the German Coalition for Patient Safety of a brochure entitled ‘*Reden ist Gold*’, a play on the German saying ‘Talk is silver, silence is golden’ (*Reden ist Silber, Schweigen ist Gold*). The Coalition for Patient Safety (*Aktionsbündnis Patientensicherheit*) ([www.aktionsbueundnis-patientensicherheit.de/](http://www.aktionsbueundnis-patientensicherheit.de/)), is a non-profit organisation formed in April 2005 by health professionals, their associations and patient organisations to build a common platform to improve patient safety in Germany.

Rather than following its counterparts in Switzerland and Austria, which have translated the Massachusetts Coalition for the Prevention of Medical Errors’ ‘*When Things Go Wrong*’ into German, the Coalition for Patient Safety wanted a more practical guide for practitioners in the German context, which includes an outline of the legal situation surrounding such

communication. This is intended to provide practitioners with greater clarification and will hopefully lead to this issue receiving more attention in the German health system.

It should be noted, however, that the Swiss Patient Safety Foundation (Stiftung für Patientensicherheit) ([www.patientensicherheit.ch](http://www.patientensicherheit.ch)) offers interactive and practical oriented workshops concerning communication with patients and families after an incident, something that is not currently available in Germany.

### *Further Possible Measures*

While a number of aspects of the wider legal framework currently in place in Germany are supportive of open disclosure and the Coalition for Patient Safety's brochure is a positive step forward, Germany is still in the early stages of a systematic approach and additional measures are required to further promote open disclosure.

The need for strong interventions is arguably more important in Germany as it is (just like its German-speaking neighbours) seen to be a high 'Uncertainty Avoidance (UA)' country. As Helmreich and Merritt note, the need for rules in a high UA country is seen as an emotional need to resolve ambiguity quickly and leave as little as possible to chance, and that discomfort over uncertainty can lead to either "strict adherence to ineffectual rules (rules for rules' sake) or hasty, unreasoned action aimed at alleviating the emotional discomfort associated with the uncertainty." [15] Thus, in the absence of clear guidance and more legal certainty in relation to the communication of healthcare incidents to patients in Germany, it appears very unlikely that the attitudes and behaviours of practitioners will change towards more transparency and openness.

It is, however, helpful to put any possible measures in the context of the wider theoretical framework for quality assurance that exists in Germany, which is consistent with the logic of the German social market economy. While health policy set by the Federal Ministry of Health establishes the legal regulatory framework in Germany, the regulatory details are generally set by corporatist bodies in the self-governing German healthcare system.[25] It is, therefore, very improbable that we will see in Germany the kind of national and state standards and laws introduced in some English speaking countries.

*Federal Medical Association:* The Federal Medical Association (*Bundesärztekammer*) ([www.bundesaerztekammer.de/](http://www.bundesaerztekammer.de/)) is the umbrella organisation of medical self-government in Germany and represents the professional interests of German doctors. As a working group of the 17 State Medical Associations (*Landesärztekammern*) the Federal Medical Association is not a public body itself, but an unincorporated association. The German Medical Assembly (*Deutscher Ärztetag*) is the annual general meeting of the Federal Medical Association and acts as the ‘parliament of the medical profession’, including delegates from all the State Medical Associations. The German Medical Assembly’s tasks include setting nationwide regulations and articulating and adopting positions of health policy. Given the important role medical self-government has in Germany, the German Medical Assembly adopting a position in support of open disclosure would be highly influential. Such a position could be supported by the inclusion of open disclosure in the Federal (Model) Professional Code of Conduct, and the respective Codes of Conduct at the State level.

*Statutory Health Insurance:* Statutory Health Insurance (*gesetzliche Krankenversicherung*) is one of the five pillars of the German social security system under which approximately 90 percent of the population is insured. The National Association of Statutory Health Insurance

Funds, together with the National Association of Statutory Health Insurance Physicians, the National Association of Statutory Health Insurance Dentists and the German Hospital Federation forms the Federal Joint Committee (*Gemeinsame Bundesausschuss*) ([www.g-ba.de/](http://www.g-ba.de/)). The Federal Joint Committee was established on 1 January 2004 by the *Statutory Health Insurance Modernisation Act* and in addition to deciding which benefits are to be included in the statutory health insurance catalogue, it has the duty to ensure quality in statutory health insurance accredited facilities and decides quality assurance measures for outpatient and inpatient healthcare. Since 1 July 2008 following health reforms, the Federal Joint Committee has made all decisions in a single cross-sectoral decision-making body capacity. By developing directives or guidelines that specifically include open disclosure as part of quality assurance, the Federal Joint Committee could set the framework for a broader implementation of open disclosure in the German health system.

*Federal Ministry of Health:* The Federal Ministry of Health is responsible not only for maintaining and enhancing the quality of the healthcare system in Germany, but for also strengthening the interests of patients. Situated within the Federal Ministry of Health, is the Patient Commissioner of the Federal Government (*Patientenbeauftragter der Bundesregierung*), currently Wolfgang Zöller. The Office of the Commissioner ([www.patientenbeauftragter.de/](http://www.patientenbeauftragter.de/)) was established on 1 January 2004 by the *Statutory Health Insurance Modernisation Act* to support the development of patient rights and publically advocate for patients' interests; particularly in relation to the right to information. Given the potential important role of open disclosure in quality improvement, respecting patient rights, and reducing errors from escalating into formal complaints or lawsuits, the Patient Commissioner should be advocating open disclosure. A first step would be to explicitly recognise the patients' right to be informed about incidents and errors that occur in their

treatment. A new patients' rights law currently being drafted by the Patient Commissioner could potentially provide an appropriate framework for this. An additional measure would be for the Patient Commissioner to lobby for legislative changes that would address the current legal dilemma for health practitioners in relation to accepting responsibility for healthcare errors.

## **9.5. Summary**

Although the ethical, financial and quality improvement benefits of open disclosure have been shown in the English speaking world, Germany still needs to provide a more supportive and consistent framework that allows practitioner to safely disclose incidents to patients. Without clear guidance and a consistent framework that is supportive of open disclosure, it seems unlikely that the attitudes and behaviours of practitioners will change towards more transparency and openness.

How this could be achieved within the unique structure of the German health system has been outlined in this article. Given the important role of medical self-government has in Germany, it is important that the Federal Medical Association show leadership on this issue. The adoption of a position in support of open disclosure by the German Medical Assembly would be highly influential. The Federal Joint Committee could also help set the framework for a broader implementation by developing directives or guidelines. Finally, explicitly recognising the patients' rights to be informed about incidents and errors that occur in their treatment in the new patients' right law currently being developed by the Patient Commissioner of the Federal Government may help open disclosure receive more attention.

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## **CHAPTER 10: APOLOGY LAWS AND OPEN DISCLOSURE**

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*Laws protecting open disclosure conversations are unnecessary and a misguided strategy to encourage error disclosure.*

There has been a dramatic change in the approach to medical errors internationally, with a new ethic of transparency replacing the traditional customs of secrecy and denial. Australia has been at the forefront of this shift towards openness with Australian health ministers endorsing a national Open Disclosure Standard in 2003, which made it clear that there is an ethical responsibility to maintain honest communication with patients and their families even when things go wrong.<sup>1</sup> However, while it is widely agreed that medical errors should be disclosed to patients, there is a large “disclosure gap” between expected practice and what is actually being done.<sup>2</sup> Most research internationally suggests that a primary barrier to disclosure is health professionals’ fears regarding legal ramifications.<sup>3</sup> Recent studies suggest that this is also the case in Australia.<sup>3,4</sup>

The Australian Commission on Safety and Quality in Health Care decided to review the Standard in 2011, to consider it in light of current research and evidence and to recommend changes to it. This resulted in the 2012 publication of the *Open Disclosure Standard review report*<sup>5</sup> and a new *Australian Open Disclosure Framework consultation draft*<sup>6</sup> which will replace the Standard. With recent research suggesting that saying sorry is a key element of successful disclosure practice, the *Australian Open Disclosure Framework consultation draft* specifies that the words “I am sorry” or “we are sorry” should be included in an apology or expression of regret. However, it makes clear that speculative statements, admission of liability or apportioning of blame must be avoided. It defines apology as “An expression of sorrow, sympathy and (where applicable) remorse” and states that “Apology may also include an acknowledgment of responsibility, which is not an admission of liability”.<sup>6</sup>

Health professionals and indemnity insurers are often concerned, however, about saying sorry because of the fear that it will be seen as an admission of liability.<sup>5</sup> Indeed, it was in response to an alleged “insurance crisis” in Australia during the period 1999–2002 that a raft of reforms were made to tort law.<sup>7</sup> Apology laws were part of this package. All Australian states and territories have apology laws that protect apologies given after an incident from being used in various legal processes, most of which have a broader application than just the medical context. These laws generally protect only expressions of regret but not admissions of fault, with five laws explicitly excluding admissions of fault, and a sixth doing so implicitly.<sup>8</sup>

In a review of Australian law, it was concluded that the limited legal protection that existing laws provide does little to reduce professionals’ fear that open disclosure increases their medicolegal risks — “a perception that likely inhibits the uptake of [open disclosure]”.<sup>8</sup> The authors argued that this situation presents a strong case for law reform that would provide stronger protections directed specifically at the contents of open disclosure conversations, concluding:

“in a perfect world, medical ethics should be sufficient to drive health professionals’ commitment to [open disclosure], but the reality is that comfort on the medicolegal front is likely to prove a useful carrot...”<sup>8</sup>

In our view, the assumption that such legal protections can narrow the disclosure gap is misguided. While medicolegal risk may surely be a factor in professionals’ reluctance to disclose errors, we believe that the true reasons are more complex. A range of factors that contribute to errors not being disclosed have been identified, including a professional and organisational culture of secrecy and blame, professionals lacking confidence in their

communication skills and the shame and humiliation associated with acknowledging an error — to oneself, one’s patient, and one’s peers.<sup>3,9</sup> Making the contents of open disclosure conversations legally inadmissible in legal proceedings is therefore unlikely to significantly change practice.

Current apology laws are also quite unnecessary. While it remains to be seen what exactly is the relationship between open disclosure and professionals’ exposure to legal action,<sup>8</sup> apology laws do not prevent patients from taking legal action following the disclosure of an error. What apology laws do is protect apologies given after an incident from being used in legal proceedings. However, the fear that apologies may be used against health professionals in legal proceedings to prove negligence is not well founded and does not provide a sound basis for implementing such legal protections. As noted in the *Open Disclosure Standard review report*, “Case law in Australia and overseas indicates that courts do not find expressions of regret, apologies or admissions of duty of care failures as evidence of liability”.<sup>5</sup>

Expressions of compassion and solidarity are always appropriate after a patient has experienced a tragic outcome. Professionals do not need legal protection for expressing sympathy or regret in such circumstances; this simply reflects the professional’s feelings and does not prove any of the elements of negligence.<sup>10</sup> Indeed, making such expressions inadmissible may paradoxically make matters worse — professionals who offer a sincere apology generally receive more positive outcomes than those who do not.<sup>11</sup>

Furthermore, even when a professional has admitted making an error, this alone will be insufficient to prove negligence. As the *Open Disclosure Standard review report* notes: “the “determination [of fault] is for the court, not for the parties to make”. In other words, an

admission of fault (whether contained within an apology or not) is, in the eyes of the law, merely the defendant's opinion. Whether this opinion is correct must be established by the facts, not by what is said...<sup>5</sup>

Although laws that make compassion inadmissible in court or protect truthful expressions of responsibility are unnecessary, they operate on ethically shaky grounds and risk diminishing the value of apologies and fuelling public cynicism towards the medical profession.

Principle 5 of the *Australian Open Disclosure Framework consultation draft* guiding principles, entitled "Supporting clinicians", states:

Health service organisations should create an environment in which all staff are:

- encouraged and able to recognise and report adverse events
- prepared through training and education to participate in open disclosure
- supported through the open disclosure process.<sup>6</sup>

In our view, these measures would have a far greater impact on closing the disclosure gap than law reform strengthening already unnecessary legal protections.

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## **CHAPTER 11: THE LEGAL PROTECTION OF APOLOGIES – TRAINING WOULD HELP MORE**

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### **11.1. Introduction**

There has been an important shift towards openness regarding adverse events and their communication to patients. Recent research suggests that saying sorry is a key element of successful disclosure practice. However, fear of legal action has been identified as a major barrier to issuing an apology in the case of error. With the enforcement of the Northwest Territories' *Apology Act* on 1 November 2013, apologies are prevented by law from being taken into account in any determination of fault or liability, and from voiding, impairing or otherwise affecting liability insurance coverage, in 8 out of 10 provinces and 2 out of 3 territories in Canada. It remains to be seen whether these laws will achieve their goals of encouraging apologies and open communication and reducing litigation. We are skeptical that apology legislation will lead to substantial improvements in patients' experiences following an adverse event. Disclosing, and apologizing for, an adverse event is one of the most complex and difficult conversations to have in healthcare. Therefore, without good training and support in this process, apology legislation is unlikely to have much of an impact on the behaviour of health care staff.

### **11.2. The Disclosure of Adverse Events**

Although unfortunate, the reality of healthcare is that clinical outcomes are not always optimal, which can lead to patients being harmed. While the most common source of harm is the patient's underlying medical condition,[1] harm can also result from an adverse event: "an event which results in unintended harm to the patient, and is related to the care and/or services provided to the patient, rather than to the patient's underlying medical condition." [2]

In recent decades, the traditional customs of secrecy and denial regarding adverse events have been replaced with a new ethic of transparency, particularly concerning disclosing adverse

events to patients. Canada has been one of the leaders in an international shift towards openness. Indeed, one of the first places that articulated the practice of maintaining “a humanistic, care-giving attitude with those who had been harmed, rather than respond[ing] in a defensive and adversarial manner” was Montreal Hospital.[3]

Healthcare providers in Canada are now considered to have an ethical, professional and legal obligation to disclose adverse events.[1] Since 2004, the Canadian Medical Association’s *Code of Ethics* has specified that physicians should “[t]ake all reasonable steps to prevent harm to patients; should harm occur, disclose it to the patient.”[4] The majority of provincial medical colleges have incorporated this provision into their codes of ethics, or have implemented specific disclosure policies.[5] Legislation mandating disclosure has also been enacted in Quebec (in 2002) and Manitoba (in 2005).[6-7] However, disclosure will likely be seen as a legal professional obligation even in provinces or territories without such legislation,[1] as physicians are seen to be under a common law duty to disclose adverse events to patients.[8] Guidance for Canadian healthcare organisations and professionals regarding disclosure was also published in two 2008 documents, the Canadian Patient Safety Institute’s *Canadian Disclosure Guidelines* [2] and the Canadian Medical Protective Association’s (CMPA) *Communicating with your patient about harm: Disclosure of adverse events*. [1]

### **11.3. Apologies and the Disclosure Process**

The act of apologizing carries great meaning in wider society as a means of “responding to harmed persons’ need for recognition, offering the individual or organisation the opportunity to make amends, [and] laying the foundation for a better relationship between both parties.”[9] A full apology is typically considered in the literature to include an

acknowledgement of the harm caused, an expression of remorse or regret, and an acceptance of responsibility.[10]

Recent research has indicated that a full and sincere apology following an adverse event is a key element of successful disclosure practice.[9] In Canada, the CMPA recommends that: “At the post-analysis disclosure stage, after the analysis of the adverse event is complete and it is clear that a health care provider or health care organization is responsible for or has contributed to the harm from an adverse event, it is appropriate to acknowledge that responsibility and to apologize.”[1]

A recent Australian report stated that, for patients, an apology is the most valued part of open disclosure and fundamental in the post-incident reconciliation process,[9] and many believe that a full apology can assist the recovery of harmed patients, promote forgiveness and the early resolution of disputes, and reduce litigation and legal costs.[9,11] However, it remains unclear what the overall impact of wide-spread disclosure and apology practices would be on malpractice litigation. While the experiences of isolated hospitals, such as the well-known examples of the VA Medical Center in Lexington, Kentucky, and the University of Michigan, suggest that disclosure and apology initiatives may in fact markedly reduce litigation,[12-13] some researchers have referred to “the great unlitigated reservoir” and have warned that such practices may actually increase lawsuits and costs substantially.[14] Traditionally, individuals and organisations have been reluctant to offer apologies in healthcare settings after things go wrong and, in many cases lawyers advise against making an apology.[5] In Canada, apologies have been considered risky for two main reasons. First, the risk that an apology would be seen as an admission of fault or liability, and second, the risk that an apology would void liability insurance coverage.[16] Nevertheless, it is widely agreed that disclosing adverse

events and apologizing to harmed patients is the ethical thing to do, regardless of whether it decreases or increases rates of litigation.[15]

**11.4. Apology Legalisation in Canada**

Apology legislation in Canada, either as a stand-alone *Apology Act* or an amendment to other legislation, has its origins in a discussion paper published by the Ministry of the Attorney General of British Columbia in January 2006.[17] The discussion paper proposed legislation that would prevent liability being based on an apology and identified three factors in support of such reform:

1. To avoid litigation and encourage the early and cost-effective resolution of disputes.
2. To encourage natural, open and direct dialogue between people after injuries.
3. To encourage people to engage in the moral and humane act of apologizing after they have injured another and to take responsibility for their actions.[17]

This proposal received wide support and the *Apology Act* was quickly introduced and passed, receiving Royal Assent on 18 May 2006.

<b>British Columbia Apology Act 2006</b>
<b>Definitions</b>  1. In this Act:  “apology” means an expression of sympathy or regret, a statement that one is sorry or any other words or actions indicating contrition or commiseration, whether or not the words or actions admit or imply an admission of fault in connection with the matter to which the words or actions relate.

"court" includes a tribunal, an arbitrator and any other person who is acting in a judicial or quasi-judicial capacity.

### **Effect of apology on liability**

2 (1) An apology made by or on behalf of a person in connection with any matter

(a) does not constitute an express or implied admission of fault or liability by the person in connection with that matter,

(b) does not constitute an acknowledgment of liability in relation to that matter for the purposes of section 24 of the Limitation Act,

(c) does not, despite any wording to the contrary in any contract of insurance and despite any other enactment, void, impair or otherwise affect any insurance coverage that is available, or that would, but for the apology, be available, to the person in connection with that matter, and

(d) must not be taken into account in any determination of fault or liability in connection with that matter.

(2) Despite any other enactment, evidence of an apology made by or on behalf of a person in connection with any matter is not admissible in any court as evidence of the fault or liability of the person in connection with that matter.

When applied in the clinical setting, the Act prevents apologies provided to patients and families by clinicians following an adverse event from being taken into account in any determination of fault or liability, and from voiding, impairing or otherwise affecting liability insurance coverage. As the definition of “apology” includes “words or actions admit or imply an admission of fault”, the Act not only protects clinicians’ statements of sympathy or regret,

“I am sorry this happy to you”, but also statements of fault, “We made a mistake, and we regret the suffering it has caused you. We are sorry.”

The Uniform Law Conference of Canada and the Canadian Patient Safety Institute (CPSI) have both encouraged all provinces and territories to enact apology legislation.[18] Using essentially the same terminology and structure as the British Columbia *Act*, apology legislation has since been enacted in Saskatchewan (amendment to the *Evidence Act* 2007) Manitoba (*Apology Act* 2007), Alberta (amendment to the *Evidence Act* 2008), Nova Scotia (*Apology Act* 2008), Ontario (*Apology Act* 2009) Newfoundland and Labrador (*Apology Act* 2009), Nunavut (*Apology Act* 2010), Prince Edward Island (amendment to the *Health Services Act* 2009, and thus limited to the health sector), and most recently, the Northwest Territories (*Apology Act* 2013). The protection provided extends “both to legal proceedings before courts and proceedings before tribunals or quasi-judicial bodies, such as regulatory authority (College) disciplinary committees or coroners’ inquests.”[18] Only the provinces of Québec and New Brunswick, and the territory of Yukon, do not have apology legislation.

While British Columbia’s legislation took the Australian state of New South Wales’ *Civil Liability Act* 2002 as a model in protecting both expressions of sympathy or regret and admissions of fault,[17] most apology legislation that has been enacted internationally – in the United States (29 out of the 36 laws) and Australia (6 out of the 8 laws) – only protects expressions of sympathy or regret.[19-20].

#### **11.5. Will the legislation achieve its aims?**

We know that honesty, transparency, and apology are essential to rebuild broken trust in the doctor patient relationship.[21] Yet, while apology legislation has been proposed as a means

of improving patient care after an adverse event, these laws have been in place in Canada for too short a time to make a fair or accurate assessment of what effect they will have and if they will achieve their goals of encouraging apologies and open communication and reducing litigation. Indeed, while legislation protecting post-accident apologies from being used as evidence of negligence has been in place in some U.S. states since 1986,[22] it also remains unclear there what impact these laws are having as key data are seldom systematically collected.[23]

However, anecdotal evidence suggests that these laws are not yet having the desired effect in Canada. In an article in *The Lawyers Weekly* on 9 March 2012, it was reported that even with the enactment of apology legislation, most counsel were still reluctant to encourage their clients to make apologies. One was quoted as stating "...[i]f I'm not sure that my client can avoid a lawsuit by apologizing, I will have trouble recommending an apology as a litigation strategy." Indeed, it was noted that "the legislation is almost incognito. Most counsel have never heard of it or have never peeked into it." [24]

Although apology legislation has been politically attractive in Canada, there is also some reason to believe that the legislation, from a legal standpoint, is actually unnecessary. While it is true that in the absence of such legislation, an apology can be admitted as evidence in court, Canadian legal scholars have noted that this is not as dangerous as widely assumed, particularly in the medical context.[25-26] As Tracey Bailey and colleagues noted in their 2007 critique of Canadian apology laws:

...it appears unlikely that a Canadian court would find a defendant negligent merely on the basis of an apology, even where the apology was an admission of fault...[A]



doctor may admit to having made an error but whether that error was negligent will be determined by whether the physician “exercised the skill, knowledge and judgment of the normal prudent practitioner of the same experience and standing”. This determination is made in large part on the basis of expert evidence. As a result, we would argue that the fear of an apology being used to establish liability is largely unfounded. As far as the authors are aware, apologies on their own even where accompanied by an admission of fault, have not led to a finding of legal liability in Canada.[25]

While apology legislation may be well intentioned and here to stay, we are skeptical that these laws will lead to much improvement of the way patients and families experience medical error, as we believe that they falsely assume that this is primarily a legal matter rather than one grounded in human relationships. Disclosing, and apologizing for, an adverse event is one of the most complex and difficult conversations that occur in healthcare.[21] While legal fears may surely be a factor in clinicians’ reluctance to apologize, and disclose adverse events in general, the true reasons are usually more complex, including a professional and organizational culture of secrecy and blame, professionals lacking confidence in their communication skills, and the shame and humiliation associated with acknowledging a harm causing mistake — to oneself, one’s patient, and one’s peers.[27] Indeed, research published in 2006 involving US and Canadian physicians suggest that the legal environment may have a more limited impact on physicians’ communication attitudes and practices regarding adverse events than often believed, and that the culture of medicine itself may be a more important barrier.[28]

## 11.6. What's the solution?

For apology legislation to make a difference to the manner and the frequency with which apologies are delivered after an adverse event, we believe that health care providers must improve the training and support that staff receive in relation to this process. In the United States the National Quality Forum (NQF) has endorsed a “safe-practice guideline” for disclosure, which recommends, among other things, that hospitals establish a disclosure support system, provide background disclosure education, ensure that disclosure coaching is available at all times, and provide emotional support for healthcare workers, administrators, patients, and families as part of the process.[29] While the CPSI has recognized the importance of disclosure education and training,[2] the focus moving forward should be on ensuring that all Canadian hospitals are adequately training and supporting staff in relation to these difficult conversations. We believe that this would make a bigger difference than legislation on the way in which apologies are delivered.

### Key Messages

- Recent research suggests that saying sorry is a key element of successful disclosure practice, but that there is often reluctance to apologize after an adverse event due to legal fears.
- Apology legislation has been widely enacted in Canada that prevents an apology from being taken into account in any determination of fault or liability, and from voiding, impairing or otherwise affecting liability insurance coverage.
- It remains to be seen whether these laws will achieve their goals of encouraging apologies and open communication and reducing litigation, but anecdotal evidence suggests that the laws are not yet having the desired effect.
- Since disclosing, and apologizing for, an adverse event is one of the most complex

and difficult conversations to occur in healthcare, ensuring that health care staff receive good training and support in relation to this process is likely to be more important than legislation in improving the delivery of apologies.

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## **CHAPTER 12: SHOULD HEALTH CARE PROVIDERS BE FORCED TO APOLOGISE AFTER THINGS GO WRONG?**

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## **Abstract**

The issue of apologising to patients harmed by adverse events has been a subject of interest and debate within medicine, politics, and the law since the early 1980s. Although apology serves several important social roles, including recognising the victims of harm, providing an opportunity for redress, and repairing relationships, compelled apologies ring hollow and ultimately undermine these goals. Apologies that stem from external authorities' edicts rather than an offender's own self-criticism and moral reflection are inauthentic and contribute to a "moral flabbiness" that stunts the moral development of both individual providers and the medical profession. Following a discussion of a recent case from New Zealand in which a midwife was required to apologise not only to the parents but also to the baby, it is argued that rather than requiring health care providers to apologise, authorities should instead train, foster, and support the capacity of providers to apologise voluntarily.

### **12.1. Case Study: Midwife Forced to Apologise to Baby**

In a recently published investigation by New Zealand's Health and Disability Commissioner (HDC), a midwife was required to provide a written apology following an error to both the parents and the baby.

The case examined the standard of care provided by a midwife who failed to discuss with the parents vitamin K administration during the antenatal period and also failed to perform a PKU test within an appropriate period after birth. The baby was admitted to hospital with neonatal jaundice and later required an urgent craniotomy and evacuation of a subdural haematoma. The HDC found the midwife in breach of the *Code of Health and Disability Services Consumers' Rights* (Code of Rights). The Commissioner recommended that the midwife



provide a written apology to Mr and Mrs B and a separate apology to Baby B, suitable for her to read when she is sufficiently mature to do so, apologising for Ms A's breaches of the Code. The apology is to be provided to HDC for forwarding by 24 June 2013 (Health and Disability Commissioner 2013a, 12).

Recommendations to provide an apology to a complainant are common in HDC investigations. For instance, in the 41 investigations published on the HDC's website in 2013, it appears that 38 investigations recommended that an apology be provided (Health and Disability Commissioner 2013b). HDC "recommendations" are more than simple suggestions that health and disability providers can freely choose not to follow. Such recommendations effectively amount to a requirement, given the HDC's policy of publicly naming providers who fail to comply with the Commissioner's recommendations, and in practice 98 percent of providers comply with HDC recommendations (Health and Disability Commissioner 2008). Indeed, the HDC's naming policy explicitly addresses apologies:

Providers have argued that naming for refusal to comply with minor recommendations, such as an apology, is not warranted. However, complainants and consumers do not consider an apology to be a "minor recommendation". If a provider refuses to apologise, it is generally because he or she is unwilling to accept that the care he or she provided was substandard. Such behaviour is itself evidence of a lack of professionalism (Health and Disability Commissioner 2008, 5).

However, the recommendation in this case to provide an apology to a baby "for her to read when she is sufficiently mature to do so" is rather strange. The midwife had already faced a competence review and an HDC investigation and has been referred by the Commissioner for

potential disciplinary proceedings. She also has stopped practising as a self-employed midwife and now only works as a hospital staff midwife. The midwife states that the case has “profoundly” affected her and that she has continued to reflect daily in her practice “on the need for good communication and documentation” (Health and Disability Commissioner 2013a, 7). What words should the midwife find to say sorry in a way that a previously harmed (but now well recovered) child can read at some future date? On top of everything else, the recommended apology to the baby seems excessive and hollow. Even with regard to the recommended apology to the parents, one could question why the midwife was not trusted to make a judgement about the matter.

While this particular case is rather unusual, it raises a general question about the appropriateness of coercing health care providers to apologise. Even though other jurisdictions may not have an authority like the HDC that requires apologies, coercion may be exerted by many parties and it is important to reflect on how apologies can be ethically promoted after things go wrong in health care.

## **12.2. The Role of Apologies**

The act of apologising carries great meaning in wider society as a means of “responding to the harmed person’s need for recognition, offering the individual or organisation the opportunity to make amends, [and] laying the foundation for a better relationship between both parties” (ACSQHC 2012, 42). While an apology can be defined in various ways, certain key elements have been identified in the literature. These include acknowledging that harm has occurred, accepting responsibility for causing the harm, expressing regret, and taking action to remedy the harm and prevent future occurrences (ACSQHC 2012; Allan and McKillop 2010).

Providing an apology also may bestow a number of positive psycho-physiological effects for those harmed. Alfred Allan and Dianne McKillop (2010) note that those harmed by adverse events can experience a range of psychological and physiological stress responses similar to any other stressor and suggest that a full apology can promote forgiveness, reduce negative effects and assist in recovery by “redressing a power imbalance, restoring dignity, achieving closure and stopping the search for an explanation or information, [and] reducing the impulse for redress by making them feel that they have been treated respectfully and fairly” (ACSQHC 2012, 44).

With the development of open disclosure in health care internationally, the role of apologies to patients harmed by adverse events has become an increasingly important consideration, with research indicating that a full and sincere apology following an adverse event is a key element of successful disclosure practice (ACSQHC 2012). Apologising to harmed patients is now widely endorsed, including in the United States (Massachusetts Coalition for the Prevention of Medical Errors 2006), Canada (Canadian Medical Protective Association 2008), the United Kingdom (National Patient Safety Agency 2009), Australia (ACSQHC 2013), and New Zealand (Health and Disability Commissioner 2009). In Australia, for instance, the Australian Commission on Safety and Quality in Health Care reviewed the *Open Disclosure Standard* in 2011 to consider it in light of current research and evidence and to recommend changes to it (ACSQHC 2012). This resulted in the new *Australian Open Disclosure Framework* that specifies that the words “I am sorry” or “we are sorry” should be included in an apology or expression of regret (ACSQHC 2013).

Unfortunately, there has traditionally been a reluctance to offer apologies in health care after things go wrong. As Marie Bismark has noted:

Health practitioners have high expectations of themselves and, not surprisingly, many find it difficult to discuss adverse events openly with patients. Some are afraid of losing patients' trust, some shy away from difficult conversations, while for others the fear of medicolegal consequences and professional sanctions is cited as an impediment to apologising (Bismark 2009, 96-97).

Nonetheless, research has found that patients often consider that disclosure “would enhance their trust in their physicians’ honesty and would reassure them that they were receiving complete information about their overall care” (Gallagher et al 2003, 1003) and that an apology “is the most valued part of open disclosure and fundamental in the post-incident reconciliation process” (ACSQHC 2012, 43). Furthermore, while clinicians’ legal fears have been identified even in very different legal settings as a key barrier to apologising (Gallagher et al. 2006), it is generally held that expressions of sympathy, and even acknowledgements of responsibility, are not an admission of liability, as this is a matter for a court to decide on the basis of facts and not by what is said (McLennan and Truog 2013). More importantly, “without a meaningful and unequivocal expression of wrongdoing, apology cannot be an authentic moral act” (Taft 2000, 1154; see also Lazare 2004). This applies even in health care where harmful errors have complex causes often not attributable to an individual person or act.

Few would quarrel with the notion that an apology is owed to patients who are harmed by substandard care and that the act of apology occurs too infrequently. The fact that an apology in these circumstances is ethically the right thing to do, and may potentially have a number of positive benefits, appears to be what is motivating New Zealand’s HDC to consistently recommend health providers apologise after they have been found in breach of the *Code of*

*Rights.* The problem with this approach, however, is that if an apology is offered primarily from fear of punishment it has little value and is likely to end up doing more harm than good.

### **12.3. The Importance of Agency**

Genuine regret, responsibility, and intention to change can only be generated by the person concerned. Like love, courage, or determination, these are virtues of character and as such must arise from the person's own agency. Such moral reflection cannot be, one might say, "outsourced." Yet, by disregarding any judgements a health care provider may have about the value of apologising to a particular patient, this appears to be precisely what the HDC is attempting to do in requiring apologies. The consequence can only be a denigration of the underlying moral value. As Jack Simmons and Erik Nordenhaug note, "[t]he institutionalization of ... a kind of artificial conscience" alters how an individual relates to ethics by suggesting that "being moral means following the professionally approved rules" (2012, under "Abstract" for a recent lecture and a forthcoming paper).

If an apology is primarily motivated by some kind of threat, it will lack the essential elements and take on the form of a charade, becoming little more than a self-interested performance. Lee Taft (2000, 2005) has passionately argued for more than a decade that apologies need to be authentic, and yet he fears we have slipped into "moral flabbiness," readily dishing out and accepting pathetic apologies: "Apologies are being conflated. We don't know the distinction between an apology that seeks to repair and an apology that is just a social grace or damage control" (Hall 2010, ¶5).

In certain circumstances, it may be appropriate to compel a moral action (such as apologising) for the purposes of moral development. In these situations, it is hoped that the individual is

changed by performing the activity in a way that he or she develops the relevant virtue. The person comes to understand, for instance, that apologising is good. When this happens, the performance of the mandated apology is an act of positive self-formation, an internalising of a previously external value. However, the coercion involved in these cases is justified only insofar as it serves the desired moral end, namely, the development of a morally mature agent, and is only appropriate in the context of certain relationships, the parent–child being the most obvious. If, in such relationships, the “child” is not allowed to “grow up,” that is, if he or she is not released at some stage to make his or her own decisions, then the purpose of the moral training is negated. Similarly, when adult professionals are ordered to apologise, it seems that they are effectively recast as moral minors and thus not merely humbled but demeaned. This is likely to cause them to resent the regulatory body and to undermine their confidence in their ability to make moral judgements and so perform their professional role.

Forced apologies can be similarly damaging for the patients receiving them. Although an apology is often desired by harmed or otherwise aggrieved patients, the written apologies that are provided to patients to fulfil regulatory bodies’ requirements are all too often full of words but devoid of meaning. Because the moral dimension of the apology is subverted, there is no sense of genuine acknowledgement and, hence, little chance of reconciliation. Like the professional, the patient is left feeling disempowered and disrespected and at odds with the institution upon which he or she is dependent.

This problem is reminiscent of what Nancy Berlinger has called “cheap grace.” Berlinger suggests that too often in the hospital setting forgiveness is assumed to be automatic once an apology is given, which she argues is “a way of formulating forgiveness so that its relational character—the actions that various actors undertake in relation to one another so forgiveness

can take place—is forgotten” (Berlinger 2003, 29). Jeffrey Helmreich also has emphasised that “[t]he moral agent’s reasons to be self-critical stem from his own investment in not harming others ... [and] mere apologies, with no self-criticism at all, seem to have a less positive effect on victims than the absence of apology” (Helmreich 2012, 594 and 602). Thus, a full apology, when it is authentic, stems from a self-examination that benefits all: the offender’s own moral development and practice, the original victim, and the anonymous others who come after. Apologies that are institutionalised in health care as means to an end at best only reward the provider (and the provider’s insurer or employer) and at worst stunt the advancement of both the individual and the profession as well as harm the patient. A recommended apology may be appropriate as a *recommendation*, but not as a masked edict. As Taft argues, “[a]uthentic apology is reserved for the morally courageous who seek for themselves and their patients the deep healing authentic apology inspires” (2005, 79).

The HDC should thus reconsider its practice of requiring health and disability providers to apologise. Apologising to harmed patients is important, and it doesn’t happen enough. However, the promotion of apologies after adverse events, in any jurisdiction, would be more appropriately achieved via strategies that nurture the development of the moral maturity required for authentic apology. This is most likely to be accomplished through education and institutional reform, but may also be supported by authorities like the HDC. Indeed, part of the HDC’s role in New Zealand is to educate consumers and providers about their rights and responsibilities. This means that instead of formally recommending apologies in investigations (recommendations that are enforced), the HDC should be trying to educate providers regarding the importance of apologising after things go wrong. A consequence of not coercing apologies will be that in some situations patients who deserve an apology will not receive one because the provider involved lacks the required character. However, in our

view, this is preferable to the general erosion of moral integrity that forcing apologies generates.

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## **CHAPTER 13: DISCUSSION AND CONCLUSIONS**

### **13.1. Importance of Research Project**

This research project attempted to address a number of important research gaps concerning medical error communication, particularly regarding the disclosure of errors to patients, in Switzerland and internationally.

With a shortage of empirical data regarding error communication existing in Switzerland, the primary aim of this research project was to empirically examine current policy and practice in Switzerland regarding error communication, with a particular focus on the disclosure of medical errors to patients. The empirical research conducted in Switzerland for this project has resulted in important insights which will need to be taken into consideration in relation to future research and efforts to improve patient safety in Switzerland. It has also made important contributions to current international knowledge regarding error communication and the impact of errors.

The empirical studies were unique in a number of ways. The quantitative survey of Swiss hospitals was the first study to publish data on the implementation status of error disclosure policies and found that less than half of responding hospitals reported currently have such a policy. The quantitative survey of Swiss anaesthesiologists was the first study internationally to comprehensively examine anaesthesiologists' attitudes and experiences regarding disclosing errors to patients and the impact of errors on anaesthesiologists. It was also the first study to examine Swiss clinicians' attitudes and experiences regarding error communication in-depth and the first quantitative study in Switzerland to examine the impact of errors on clinicians, and one of the few studies on this issue outside of North America. It found significant differences in attitudes between departments regarding error communication, and that respondents commonly experienced distress following an error, even after a minor error

or near miss, but virtually all disagreed that hospitals adequately support after an error. The qualitative interviews with key stakeholders in Switzerland were the first time such individuals have been interviewed in Switzerland to explore their attitudes about medical errors and error communication and their views about what measures could lead to improvements in Switzerland. Participants raised concerns about the impact criminal liability and liability insurance was having on error communication in Switzerland. Finally, the qualitative interviews with Swiss nurses were the first time that nurses' attitudes and experiences concerning disclosing errors to patients have been explored in Switzerland. While nurses recognised patients' right to be informed errors, the majority thought that many errors were concealed from patients in practice.

The theoretical research conducted internationally for this project has also resulted in important analysis of the appropriate role of the law in relation to promoting apologies after a medical error which will need to be taken into consideration concerning future research and initiatives. It has also made an important contribution to international knowledge regarding current error disclosure policies in Continental Europe.

The theoretical papers were unique in a number of ways. The examination of error disclosure in Germany was the first time that the regulation of error disclosure in Germany has been examined, and one of the few examinations of this issue in Continental Europe. It was found that error disclosure currently plays no significant role in German health policy but there have been some positive developments. The examination of apology laws in Australia was the first time recent developments regarding errors disclosure and the appropriateness of apology laws in Australia have been examined. It was argued that these laws are unnecessary and that hospitals supporting clinicians through the disclosure process is likely to have a far greater

impact. Similarly, the examination of apology laws in Canada was the first time that recent developments in Canada in relation to apology laws and what other measures might be more helpful in promoting apologies, have been examined. It was argued that without good training and support in this process, apology legislation is unlikely to have much of an impact on the behaviour of health care staff. Finally, the examination of forced apologies in New Zealand was the first time the Health and Disability Commissioner's practice of requiring clinicians to apologise has been questioned and one of the first examinations internationally of the ethical appropriateness of coercing apologies. It was argued that instead of requiring clinicians to apologise, authorities should instead train, foster, and support the capacity of providers to apologise voluntarily.

Two important themes that emerged in this research project, the relationship between error communication and the law and the relationship between error communication and culture, require further discussion.

### **13.2. Error Communication and the Law**

The relationship between error communication and law has been an important aspect of this research project. While some of these legal issues are important and need to be addressed, in this author's view, far too much focus has been put on the role of the law in relation to error communication, both as a barrier to, and as a means of promoting, such communication. It is hoped that this research, both empirical and theoretical, will make a contribution, however small, to efforts to take a more balanced view of this issue.

Internationally, organisations' and clinicians' legal fears are consistently identified as one of the most important barriers to error communication (Iedema et al., 2011; Hartnell et al.,

2012). A number of the key Swiss stakeholders interviewed for this project also identified legal fears to be a major barrier to such communication in Switzerland. Although, it should be noted this was a perception held primarily by informants with a legal or quality background, not by those who were actually clinicians. Be that as it may, these informants raised important concerns about two areas of the law in Switzerland, criminal liability and liability insurance, which require further research and consideration.

Regarding the use of criminal law concerning patient harm, it was argued that it would be misguided to think that the criminal law has no place in the clinical setting. There will always be events that warranted a criminal response. However, this author shares the concerns of many of the key Swiss stakeholders who felt that Switzerland currently has the threshold for criminal liability set too low and reported a number of undesirable consequences on clinicians and error communication and quality improvement. Further research, however, is required in Switzerland to establish in more detail the impact these criminal investigations are having on clinicians and wider quality improvement initiatives.

However, it has been argued that there are a number of theoretical and ethical considerations that arguably make the use of the criminal law for any medical error, regardless of its outcome, inappropriate and likely to do more harm than good. For the criminal law to be morally meaningful and just in relation to patient harm, the growing international calls for the focus of the criminal law in the context of patient harm to be upgraded and narrowed to wilful and reckless conduct were endorsed. It should be noted that in most English common law jurisdictions, criminal liability is already generally limited to instances of death caused by gross negligence, and the United Kingdom is also currently considering criminalising healthcare professionals for wilful neglect (Bibby & Tomkins, 2014).

A clinician who kills a patient by wilful or reckless acts or omissions clearly deserves to be criminal punished. However, outside of these instances, it is questionable whether the criminal law should be involved in most instances of harm causing medical errors given what we know about the causes of medical errors. There are (or, at least, should be) more appropriate forms of accountability to address these cases. Ron Paterson, the former Health and Disability Commissioner of New Zealand, initially resisted changes to the criminal law in New Zealand in the 1990s which limited criminal liability to instances of death caused by gross negligence. However, after 10 years as Commissioner, he now thinks that even a manslaughter conviction is an unhelpful form of accountability for a careless clinician whose acts or omissions cause a patient's death (Paterson, 2013). Paterson writes (2013, p. 246):

“If the purpose is to recognise the value of a human life, and the tragedy of preventable death, that is better achieved through coronial mechanisms designed for that very purpose. If the aim is deterrence (to prevent the deaths of other patients in similar situations), manslaughter prosecutions are an ill-conceived intervention, as shown by the continuing deaths from administration of the anti-cancer drug vincristine, notwithstanding highly publicised English prosecutions of doctors who mistakenly administered it. If the goal is to provide answers for grieving families, mediations or investigations by independent public officials such as a Commissioner or coroner are more effective to that end.”

While Paterson is writing about instances of patient death, and about an environment that already limits criminal liability to gross negligence causing death, these thoughts point to other, arguably more appropriate, forms of accountability. These thoughts are surely equally applicable in Switzerland, particularly in relation to cases of non-fatal bodily injury. However,



it will need to be considered if the other accountability mechanisms currently available in Switzerland for harmed patients to seek redress are sufficient to achieve such aims.

However, this author acknowledges that the removal of criminal liability for medical errors causing non-fatal bodily injury (let alone those that led to death) may be unlikely given the legal system in Switzerland and the way criminal law has been developed here. Nevertheless, focusing primarily on individual failure and blame is outdated and particularly unsuited in cases of medical errors. If the criminal law is going to continue to be used in Switzerland for cases of medical errors, then it needs to at least take into account the systematic causes of errors better. It is outside the focus of this thesis, and this author's expertise, to examine how this could be achieved in any meaningful way. However, it would likely involve some use of corporate criminal liability. Prof. Pieth and his colleague Radha Ivory edited a 2011 book entitled "*Corporate Criminal Liability: Emergence, Convergence, and Risk*" (Pieth & Radha, 2011). In the introductory chapter to the book, Pieth and Radha set out the analytical framework and discuss the theories that have given rise to the different models of corporate criminal liability. It would appear that the models arising out of the "reality theory", which "recognizes the corporation as possessing a distinct personality in its own right, as well as a being a person under the law" (2011, p. 6), offers the best possibility of taking into account the systematic causes of medical errors. This author is already familiar with corporations being held vicariously liable for the civil wrongs of their servants, as that is the case in New Zealand. Indeed, the Health and Disability Commissioner's Office sends all complaints about individual clinicians working in public hospitals to the CEO of the relevant District Health Board, as the Board could be held vicariously liable. However, Pieth and Radha also noted the development of the increasingly popular holistic models, which "regard corporations as themselves capable of committing crimes through established internal patterns of decisions-

making (corporate culture or corporate (dis)organisation)” (pp. 6-7), and aggregative approaches, which “also treat the corporation as the principal offender but they do so by adding together the different acts, omissions, and states of mind of individual stakeholders...” (p. 7). Such models could possibly be used to shift the focus away from individual guilt and more appropriately capture the complexity of medical error causation. However, there exist a number of challenges with the use of corporate criminal liability (which entities can be criminally liable, what offenses can corporations be liable for etc.) that often depend on local traditions and laws (Pieth & Radha, 2011), which would require further consideration regarding the use of such laws in relation to harm causing medical errors.

Concerning liability insurance, consistent with international literature, key Swiss stakeholders’ reported that some liability insurance companies in Switzerland are inhibiting communication with harmed patients after an error. This is concerning and requires further investigation. However, it is important to note that key stakeholders also felt that organisations and clinicians could be over cautious. In the first instance, further research is needed to ascertain whether organisations’ and clinicians’ reported fear over the loss of liability insurance coverage for communicating and apologising to harmed patients is one based in reality. There has been some research internationally that suggests that this fear is not always well founded (Burch Barr, 2009) and it will be important to establish whether the loss of liability coverage is a real problem or simply a misperception. Either finding would be important and require an appropriate response.

Nevertheless, it is clear that communication after an error is often inhibited by liability insurance companies due to fears that it will increase litigation and costs. At this point in time, there is simply insufficient data to know whether this fear is well founded, it is a complex

issue and there are “compelling arguments on both sides of the debate” (Wu et al., 2014, p. 3). More research is needed on this issue both internationally and in Switzerland. However, it should be considered whether the type of system used to compensate harmed patients may itself be part of the problem. Even if an error is disclosed and the matter is not litigated, the patient harmed by the error may still have financial needs to be addressed (Wu et al., 2014). As Wu and colleagues have noted (2014, p. 3):

“The imperative to compensate patients for harm they have sustained from negligent patient safety incidents is a universal challenge, with considerable international diversity in approaches. This diversity reflects variables such as the presence or absence of a centralized health authority, the way in which health care is funded, and litigation laws and culture in different settings.”

Switzerland, like most jurisdictions internationally, use a “fault” based model, with errors of individual clinicians being identified as the grounds for compensation. However, as Charles Vincent (2003, p. 240) has argued in relation to the English tort approach, but equally applicable to malpractice litigation generally:

“With the rise of patient safety and systems thinking about the causes of adverse events, the tort system is looking increasingly anachronistic and an obstacle to progress on patient safety. The system has been criticised as costly, slow, inequitable in various respects, and blame orientated. It can be traumatic for those involved—patients and professionals alike—inducing much bitterness on both sides. The system is inherently adversarial and, although much of the trauma can be reduced by

sympathetic and effective lawyers on both sides, patients still have to fight for compensation at a time when they really need to be looked after.”

Vincent (2003, p. 241) ends by suggesting that:

“The most important criterion for assessment of any compensation system should be its impact on injured patients and their families, not just in providing appropriate financial recompense where necessary but in ensuring that explanations, apologies, and long term support and care are regarded as the expectation rather than the exception. Compensation would ideally be a gesture of reconciliation and an acknowledgement that a healthcare organisation has a special duty of care to those it has harmed.”

A number of commentators, including Vincent (2003) and Studdert and Brennan (2001), have argued that no-fault systems of compensation such as those used in New Zealand and the Nordic countries, offer a better way forward. However, various countries have rejected the idea of implementing a no-fault compensation system (Stauch, 2008). While no-fault systems have a number of positive aspects to them, as New Zealand has seen, there are challenges involved in keeping such a system fully funded and deciding what is to be covered, and, as we will see below, such a system does not solve the problems regarding communication and apologies.

As noted earlier, early compensation systems have been introduced in some organisations in the United States, such as the University of Michigan, which have been attached to error disclosure programs (Kachalia, 2010). While these organisations are still in “fault” based

legal systems, these institutionally based compensation systems appears to achieve many of the criteria Vincent sets out above. While this author has suggested that such systems could potentially be implemented in Swiss hospitals if they move towards self-insurance approaches, it should be acknowledged that there may be difficulties in this. In the United States, the usefulness of early compensation programs appears to be highly contingent upon the laws and regulations of different states and even health networks. Legal action is taken far more frequently in the United States after such events, and early offer programs there are principally seen as a way to reduce transactional costs (although there can of course be other benefits). The fairness of these programs to adequately compensate patients is also sometimes in question. Many hospitals in the United States have already significantly invested in their legal departments and infrastructure to run these early offer programs. The good ones obtain independent peer expert opinion to comment on the care provided except in the most obvious cases. It is questionable whether hospitals in most other jurisdictions, including Switzerland, are resourced sufficiently to assess claims and determine adequate compensation, as such legal and monetary determinations are so complex. It should also be noted that other English speaking countries that have been at the forefront of error disclosure, including the United Kingdom, Australia and Canada, have not adopted this early compensation approach.

What a number of these countries have adopted, however, is apology laws, which are one of the best examples of the law being used to promote error communication and apologies. While these laws have been politically attractive, this author has argued that they are legally unnecessary and unlikely to be effective. Indeed, while apology laws have been in place in some U.S. states since 1986 (Taft, 2005), there has been no sign that they are having the desired effect. Although, it should be acknowledged that part of the reason why it remains unclear what impact these laws are having is that key data are seldom systematically collected

(Mastroianni, 2010). This author has discussed this issue with two prominent advocates of apology laws, and they agree that apologies (either full or partial) will unlikely lead to a finding of negligence as widely feared. However, they note that there is this perception out there that apologies are dangerous and that these laws may help address this. This author simply does not agree that it is appropriate for governments to be enacting legislation to address fundamental misunderstandings of the law, which would be better addressed via other means, or that they will be effective. Efforts need to be focused on reforming areas of the law that are actually problematic. Disclosing a medical error to a patient will always require a certain amount of courage on behalf of the clinicians, but they should not face unnecessary barriers to ethical practice. While this author may be proved wrong about the effectiveness of these apology laws, he currently remains convinced that they are a misguided strategy to promote apologies and error communication. Similarly misguided is the practice of coercing clinicians to apologise to harmed patients. While the practice may result in clinicians writing an “apology” to patients, it has been argued that these apologies are often inauthentic and likely to do more harm than good. While it would be preferable to see practice stopped in New Zealand, it is highly unlikely to occur. The practice has become ingrained and it is something the Commissioner can point to as having achieved for the complainant.

While law reform may be desirable for other reasons, it seems unlikely that it would lead to major changes in error communication practice. While legal fears are undoubtedly a factor in some clinicians’ reluctance to communicate errors, as noted previously, research published in 2006 involving US and Canadian physicians suggest that the legal environment may have a more limited impact on physicians’ communication attitudes and practices regarding medical errors than often believed (Gallagher et al., 2006b). Similarly, the survey conducted in Switzerland for this project found no correlation between anaesthesiologists’ attitudes about

malpractice and willingness to communicate serious errors. Indeed, similar to the North American study, 71% of respondents in the Swiss survey thought that disclosing a serious error to a patient would make it *less* likely that a patient would complain about them.

The assumption that law reform will increase error communication falsely assumes that we are primarily dealing with a legal matter rather than one grounded in human relationships. It is important to address unnecessary legal barriers to such open communication, but changing the law to removed real or perceived barriers is not a magic bullet. To see this one only needs to look at New Zealand. Even though New Zealand has had a no-fault system since the 1970s, and thus virtually all legal barriers have been removed, it has been noted that:

“Nevertheless, cultural barriers to openness and honesty persist—the availability of no-fault compensation removes the risk for litigation, but providers remain fearful of the potential for adverse publicity, disciplinary processes, and reputational damage after disclosure.” (Wu et al., 2014, p. 3)

While it may be argued that such law reform is a necessary, but not sufficient, condition for significant changes in practice, the evidence suggests otherwise. Some of the most successful disclosure and apology programs, such as those at the VA Medical Center and the University of Michigan, have occurred in very challenging legal environments and did not require law reform to achieve these results.

In summary, a great deal of focus has been given internationally to the role of the law in relation to error communication, both as a barrier to, and as a means of promoting, such communication. While legal fears are undoubtedly a factor in some clinicians' reluctance to

communicate errors, the results of the survey conducted in Switzerland for this project supports international research that suggests that the legal environment may have a more limited impact on physicians' communication attitudes and practices regarding medical errors than often believed. Indeed, most respondents in the Swiss survey thought that disclosing a serious error to a patient would actually reduce the chances of legal action. While it is important to address unnecessary barriers to ethical practice, and law reform may be desirable for other reasons, it seems unlikely that changes in the law would lead to major changes in error communication practice.

### **13.3. Error Communication and Organisational / Professional Culture**

What seems to be a more important determinant of error communication practice than legal issues is the culture of organisations and the medical profession. The relationship between error communication and culture arose most clearly in this project during the survey of Swiss anaesthesiologists. It was also an important theme that emerged in the interviews with the key stakeholders in Switzerland; however, this data has not yet been published.

It has already been noted that research published in 2006 involving US and Canadian physicians suggested that the culture of medicine itself may be a more important barrier. Gallagher and colleagues (2006b) surveyed 2637 physicians in the United States and Canada, partly with the aim of examining the malpractice environment's actual effect on physicians' error disclosure attitudes and experiences. The study found that United States and Canadian physicians' error disclosure attitudes and experiences are similar despite very different malpractice environments. As Gallagher and colleagues (2006b, p. 1609) argued:



“The fact that US and Canadian physicians’ attitudes transcend country boundaries suggests that these beliefs may relate to the norms, values, and practices that constitute the culture of medicine. The medical education system, a potent force for professional socialization, is remarkably similar in both countries. While acculturation begins in medical school, the most critical cultural norms are inculcated within specialties. The finding that physician attitudes generally varied more by specialty than by country further supports the role of medical culture in shaping these views.”

The results of the survey of Swiss anaesthesiologists have given more weight to the view that medical culture may be the more important determinant regarding error communication. However, they go further in suggesting at which level these cultural norms may be being instilled. Gallagher and colleagues suggested that this may occur most critically within specialties, however, partly due to their sampling technique, these studies did not report on subgroup analysis such as department. While attempts to survey more than one specialty in Switzerland for this project were not successful, the study was able to survey all of the university hospitals’ anaesthesia departments in Switzerland. As reported earlier, significant differences in attitudes between departments regarding error communication were found. These findings were remarkable given the study only included one specialty in one country, and suggest that the individual departments/hospitals culture may be the more important factor. Further research is needed to examine whether significant differences in error communication attitudes between departments exist in other specialties and countries, and to understand the factors that influence local culture and thus the actions required.

International research on general patient safety culture has also found that organisational culture significantly varies between hospitals (Speroff et al., 2010). Speroff and colleagues

(2010), for instance, found that a healthcare organisation's culture is a critical factor in the development of its patient safety climate and in the successful implementation of quality improvement initiatives, with group culture hospitals having significantly higher safety climate scores than hierarchical culture hospitals. These findings may well be applicable in relation to error communication practice. Indeed, it has been suggested in this project that the need for clear guidance is arguable more important in high "uncertainty avoidance" countries, which are usually characterised by hierarchical cultures.

Indeed, the implementation of an error disclosure policy may be an important indication of organisational culture concerning error communication. Thus the fact that the survey of Swiss hospital conducted for this project found that less than half of responding hospitals reported currently having an error disclosure standard, and more than a third have no plans to do so, is potentially very concerning. However, the survey simply asked whether hospitals whether there exist an internal hospital standard which provides that patients or their relatives are to be promptly informed about medical errors that result in harm, offering the following answering options: "yes; no; implementation planned within the next 12 months". Further research is needed in Switzerland to examine the contents of the existing policies, how they differ between hospitals, the relationship between these policies and the practice of error disclosure, and the factors that lead a hospital to develop or not develop such a policy.

As noted earlier, international research has found that state and health organisations error disclosure policies, along with the increase of specially trained staff, has been one of the driving forces behind the increased disclosure of errors (Iedema et al., 2008a). However, it is clear that an institutional policy in itself is no magic bullet. Internationally there has been a challenge of turning policy into practice, particularly on a large scale. Wu and colleagues

(2014, p. 2) described the experience of the United Kingdom in implementing the 2005 national policy, *Being Open*:

“...although the policy achieved endorsement and alignment at the highest levels of the health service, the engagement and support needed to implement Being Open were not adequately transmitted to those on the front line. Despite guidelines in place on how to create a patient safety culture, an eLearning tool, and Being Open training workshops (the most extensive of which included opportunities to practice disclosure skills with actors), uptake was slow—perhaps because insufficient numbers received the training and perhaps because of the lack of enforcement and potential sanctions for noncompliance.”

The importance of training and support in relation error disclosure has been highlighted repeatedly in this project, both in the empirical and the theoretical research. The survey of Swiss anaesthesiologists found that only 12% of respondents had received any education or training on how to disclose errors to patients, although, 93% were interested in receiving such education or training. It was suggested that increasing anaesthesiologists’ training may be an important step in increasing error disclosure. However, it needs to be acknowledged that there are challenges involved in this. These are nicely described by Truog and colleagues (2010, p. 59):

“Another dilemma was created by the fact that all the Harvard hospitals have hundreds, even thousands, of clinicians who at any time could become involved in a serious medical error. On the one hand, any effective educational strategy must involve a broad-based learning initiative designed to provide all these clinicians with a

general understanding of the hospital's approach to disclosure, particularly in view of the fact that most of these clinicians were trained to withhold any information from patients that might convey wrongdoing or liability. On the other hand, we realized that it would be unrealistic to think that any educational program could enable this huge number of clinicians to learn and retain the knowledge needed to have these conversations well at any moment in time. Therefore we decided to endorse an approach that would assure the "just-in-time" availability of expertise and help by concentrating our educational efforts on a small number of disclosure "coaches" who would be available to all clinicians within the institution on a 24/7 basis."

While the best model for providing such coaching expertise has not yet been fully resolved, Truog and colleagues (2010, p. 61) argued that:

"Whatever approach is taken...a common principle is that patients and families want to have the primary conversations with their clinicians, not with coaches, risk managers, or other institutional representatives. The primary role of the coach is to assist these clinicians in how to have this conversation well, not to insert themselves directly into the disclosure process."

It should be noted that 95% of respondents in the survey of Swiss anaesthesiologists were interested in receiving support from an expert on patient communication after a serious error. While increasing general disclosure training in Swiss medical school and postgraduate training may be an important step in increasing error disclosure in Switzerland, consideration should also be given to the creation of "just-in-time" disclosure coaches.

Finally regarding the relationship between error communication and culture, is the issue of blame. The medical profession has “traditionally relied upon that method found most unhelpful in reducing errors and improving quality—namely, shame and blame of individuals with accusations of incompetence, unprofessionalism, and unworthiness to treat patients...” (Liang, 2002, p. 64). Wu and colleague (2014, p. 2) have suggested that “Perhaps part of the reason that many are drawn to this simplistic punitive paradigm is that it implies that the organization has taken the incident seriously and has been held accountable. However, this “blame culture” is at odds with the contemporary “systems” conception of error causation, and is unlikely to foster an environment where clinicians feel they can safely discuss medical errors openly. A number of Swiss key stakeholders, however, reported that a culture of blame was still prominent in Swiss hospitals. Further research is needed to establish this.

Advocates of the “systems” approach to errors initially promoted a “blame-free” environment. However, as Sharpe (2004) has noted, this approach raised a number of concerns about accountability for harmful errors, including that the approach may diffuse accountability too widely and that it may minimise the role of individual agency so much as to affect professionalism. Indeed, it has become clear that a “blame-free” culture is not appropriate. As James Reason, the “father” of the systems approach, has stated (cited in Banja, 2005, p. 134):

“A no-blame” culture is neither feasible nor desirable. A small proportion of human unsafe acts are egregious (for example, substance abuse, reckless non-compliance, sabotage and so on) and warrant sanctions, severe ones in some cases. A blanket amnesty on all unsafe acts would lack credibility in the eyes of the workforce. More importantly, it would be seen to oppose natural justice.”

Instead, Reason suggests that an organisation should (cited in Banja, 2005, p. 143):

“Substitute the (erring) individual ... for someone else coming from the same domain of activity and possessing comparable qualifications and experience. Then ask the following question: “In light of how events unfolded and were perceived by those involved in real time, is it likely that this new individual would have behaved differently?” If the answer is “probably not” then ... apportioning blame has no material role to play other than to obscure systemic deficiencies...”

Indeed, Wu and colleagues (2014, p. 2) have noted that over the past decade healthcare organisations have “...moved away from the anachronistic “blame culture” first toward a “blame-free culture” and subsequently to a more practical and necessary “fair blame culture” or “just culture”...” However, there remains a challenge internationally of achieving such a “just culture”, of balancing the responsibilities of individual clinicians and organisations, and also the rights of harmed patients to achieve suitable redress. In Switzerland, further research is needed to examine the current culture that exists in Swiss healthcare organisations in relation to blame for patient harm, and how a “just culture” can best be achieved given prevailing norms and the current legal system with its focus on individual accountability for patient harm.

A step that is likely required in every country regarding this issue is to open a dialogue with the wider public about the complex nature of patient harm and quality improvement (Wu et al., 2014). Previous studies have found that patients often endorse punishing individual clinicians for harmful errors (Blendon et al., 2002). This supports this author’s experiences at the Health and Disability Commissioner’s Office. Complainants would often want very strong

punishment for individual clinicians and not understand the need to improve systems. Opening a dialogue with the public on these issues may help aid understanding and increase the role of patient involvement in quality improvement (Wu et al., 2014).

In summary, the culture of organisations and the medical profession appears to be a more important determinant of error communication practice than legal issues, and addressing culturally based barriers to error communication may do most to change practice. The implementation of an error disclosure policy may be an important indication of organisational culture concerning error communication. The fact that less than half of responding Swiss hospitals reported currently having an error disclosure standard, and more than a third have no plans to do so, is thus concerning. While international research has found that error disclosure policies has been one of the driving forces behind the increased disclosure of errors, there has been a challenge internationally of turning policy into practice, and policy needs to be supported by disclosure training. Achieving a “fair blame culture” in relation to patient harm may also be an essential step to promoting ethical practice regarding to error communication.

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# CURRICULUM VITAE

## Personal details

Name: Stuart Roger McLennan  
Date of Birth: 23 May 1983, Dunedin, New Zealand  
Nationality: New Zealand Citizen  
Residency: Permanent Resident Germany / Resident Switzerland

## Education

2011-2014 Universität Basel – Switzerland  
Doctoral candidate in Biomedical Ethics (Dr. sc. med./PhD)  
Title: Medical Error Communication: Policy and Practice  
PhD Committee:  
Prof. Dr. Bernice Elger – Institute for Biomedical Ethics.  
Prof. Dr. Daniel Scheidegger – Department of Anaesthesia.  
Prof. Dr. Mark Pieth – Department of Criminal Law and Criminology.

2002-2008 University of Otago – New Zealand  
2008 Master of Bioethics and Health Law. Awarded with Distinction.  
Title: Raging Against the Dying of the Light: Cardiopulmonary Resuscitation  
Supervisors:  
Professor Peter Skegg – Faculty of Law.  
Dr Neil Pickering – Bioethics Centre.

2005 Diploma for Graduates.  
2004 Bachelor of Arts: Philosophy.

1997-2001 Kaikorai Valley College – New Zealand

- 2000 Sixth Form Certificate.  
1999 School Certificate.

## **Employment**

- 2011-2014 Institute for Biomedical Ethics  
Universität Basel, Switzerland  
Position: Research Assistant (wissenschaftlicher Mitarbeiter).  
Full time, fixed term.
- 2010-2011 Section of Social Policy and Social Economics  
Ruhr-Universität Bochum, Germany  
Position: Research Assistant (wissenschaftliche Hilfskraft).  
Part time, fixed term.
- 2010-2011 Institute of Medical Ethics and the History of Medicine  
Ruhr-Universität Bochum, Germany  
Position: Research Assistant (wissenschaftliche Hilfskraft).  
Part time, fixed term.
- 2008-2009 Office of the Health and Disability Commissioner  
Auckland, New Zealand  
Position: Complaints Assessor.  
Full time, permanent.

## **Scholarships and Awards**

- 2013 Top Paper Award. Category: Disclosing Medical Errors  
International Conference on Communicating Medical Error, Switzerland
- 2007-2008 Health Research Council Summer Studentship

	University of Auckland, New Zealand
2007-2008	Faculty of Arts Summer Scholarship University of Auckland, New Zealand
2007	Postgraduate Award University of Otago, New Zealand
2005-2006	Bioethics Centre Summer Scholarship University of Otago, New Zealand
2003	J.A. Harvie Prize in Philosophy University of Otago, New Zealand
1996	Caltex Community Star Award Abbotsford Primary School, Dunedin, New Zealand

## **Academic Funding**

### *Competitive*

1. Käthe-Zingg-Schwichtenberg-Fonds – Swiss Academy of Medical Sciences. Project: Error Disclosure Attitudes in Switzerland. Awarded 39,550 CHF – June 2012.

### *Other*

2. Freiwillige Akademische Gesellschaft Basel. Research visit to Harvard Medical School. Awarded 1000 CHF – June 2013.
1. Swiss Academy of Medical Sciences Fonds. Project: Error Disclosure Standards in Swiss Hospitals. Awarded 3000 CHF – July 2011.

## **Research Visits**

1. Division of Medical Ethics, Harvard Medical School, Harvard University – November 2013.

## **Publications**

### *Book Chapters*

3. McLennan, S. (2014). Behandlungsfehler [Medical Errors]. In: Elger, Biller-Andorno, Rüttsche (Eds.), Ethik und Recht in Medizin und Biowissenschaften – aktuelle Fallbeispiele aus Klinischer Praxis und Forschung [Ethics and Law in Medicine and Biosciences - Current Case Studies from Clinical Practice and Research] (pp. 3-18). Berlin: De Gruyter.
2. McLennan, S. (2013). The Handling of Medical Errors in New Zealand. In: A. Frewer, K.W. Schmidt & L. Bergemann (Eds), Jahrbuch Ethik in der Klinik: Fehler und Ethik in der Medizin Neue Wege für Patientenrechte [Yearbook Ethics in the Clinic: Errors and Ethics in Medicine, New Approaches for Patients' Rights] (pp. 339-345). Würzburg: Königshausen & Neumann.
1. McLennan, S. (2012). Accessing Justice After An Adverse Event: An International Perspective. In: K.W. Schmidt, M. Sold & T. Verrel (Eds.), Zum Umgang mit Behandlungsfehlern: (Organisations) Ethische, rechtliche und psychosoziale Aspekte [Dealing with Medical Errors: (Organisations) Ethical, Legal and Psychological Aspects] (pp. 263-275). Berlin: Lit Verlag.

### *Peer Reviewed Journal Articles*

21. Werding, M. & McLennan, S: International Portability of Health-Cost Cover: Mobility, Insurance, and Redistribution. CESifo Economic Studies, accepted for publication. Journal Impact Factor: 0.561.
20. McLennan, S., Rich, L.E. & Truog, R.D. The Legal Protection of Apologies – training would help more. Canadian Medical Association Journal, accepted for publication. Journal Impact Factor: 6.5

19. McLennan, S., Walker, S. & Rich, L.E. Should Health Care Providers Be Forced to Apologise After Things Go Wrong? *Journal of Bioethical Inquiry*, accepted for publication. Journal Impact Factor: 0.594
18. Fuchs, L., Novack, V., McLennan, S., Celi, L.A., Baumfeld, Y., Park, S., Howell, M.D., Talmor, D.S. (2014). Trends in severity of illness on ICU admission and mortality among the elderly. *PLOS ONE*, 9(4), e93234. Journal Impact Factor: 3.730
17. McLennan, S. & Elger, B. (2014). Criminal Liability and Medical Errors in Switzerland: An Unjust System? *Jusletter*, 27 January 2014: [http://jusletter.weblaw.ch/article/en/\\_11937](http://jusletter.weblaw.ch/article/en/_11937)
16. McLennan, S., Engel, S., Ruhe, K., Leu, A., Schwappach, D. & Elger, B. (2013). Implementation Status of Error Disclosure Standards Reported by Swiss Hospitals. *Swiss Medical Weekly*, 143, w13820. Journal Impact Factor: 1.895.
15. McLennan, S.R. & Truog, R.D. (2013) Apology Laws and Open Disclosure. *Medical Journal of Australia*, 198(8), 411-412. Journal Impact Factor: 2.853.
14. Fuchs, L., Chronaki, C.E., Park, S., Novack, V., Baumfeld, Y., Scott, D., McLennan, S., Talmor, D. & Celi, L.A. (2012). ICU admission Characteristics and mortality rates among elderly and very elderly patients. *Intensive Care Medicine*, 38(10), 1654-61. Journal Impact Factor: 5.399.
13. McLennan, S., Beitat, K., Lauterberg, J. & Vollmann, J. (2012). Regulating Open Disclosure: A German Perspective. *International Journal for Quality in Health Care*, 24(1), 23-27. Journal Impact factor: 2.064. 5-Year impact factor: 2.402.
12. McLennan, S. (2012). CPR Policies and the Patient's Best Interests. *Journal of Resuscitation*, 83, 168-170. Journal Impact Factor: 4.177.
11. McLennan, S., Paterson, R., Skegg, P.D.G. & Aickin, R. (2011). The use of CPR in New Zealand: is it always lawful? *New Zealand Medical Journal*, 124(1328), 106-112.

10. Wicker, S., Rabenau, H.F, Gottschalk, R., Krause, G. & McLennan, S. (2010). Niedrige Influenzaimpfquoten bei Mitarbeitern im Gesundheitswesen: Zeit für einen neuen Ansatz [Low influenza vaccination rates among healthcare workers: Time to take a different approach]. *Bundesgesundheitsblatt*, 53, 1298-1303. Journal Impact Factor: 1.25.
9. McLennan, S. & Wicker, S. (2010). Reflections of the influenza vaccination of healthcare workers. *Vaccine*, 28(51), 8061-8064. Journal Impact Factor: 3.572.
8. McLennan, S., Celi, L.A, Gillett, G., Penney, J. & Foss, M. (2010). Nurses views regarding the end-of-life at a New Zealand hospital. *Kai Tiaki Nursing New Zealand*, 16(4), 12-14.
7. McLennan, S., Vollweiler, M. & Celi, L.A. (2009). How can nurses' 'flu vaccination rates be boosted? *Kai Tiaki Nursing New Zealand*, 15(4), 12-14.
6. McLennan, S. (2008). The development of CPR. *New Zealand Medical Journal*, 121(1284), 71-77.
5. Glasgow, J.L., McLennan, S.R., High, K.J., & Celi, L.A. (2008). Quality of Dying in a New Zealand Teaching Hospital. *Quality and Safety in Health Care*, 17(4), 244-248. Journal Impact Factor: 2.856.
4. Carden, G.P., Graham, J.W., McLennan, S., & Celi, L.A. (2008). Long-Term Outcome of Long Stay ICU and HDU Patients in a New Zealand Hospital. *Critical Care and Shock*, 11(1), 173-181.
3. McLennan, S., Gillett, G., & Ceil, L.A. (2008). Healer, heal thyself: Health care workers and the influenza vaccination. *American Journal of Infection Control*, 36(1), 1-4. Journal Impact Factor: 3.036. 5-Year Impact Factor: 3.077.
2. McLennan, S., Celi, L.A., & Roth, P. (2007). The Health and Safety in Employment Act and the influenza vaccination of healthcare workers. *New Zealand Medical Journal*, 120(1250), 1-6.

1. McLennan, S. (2005). Surrogacy and the Child's Right to Identity. *New Zealand Family Law Journal*, 5(4), 96-100.

*Non-Peer Reviewed Journal Articles*

1. Schmidlin, E., Elger, B.S. & McLennan, S. (2014). Assisted dying in Switzerland: where does it come from and where is it going? *European Journal of Palliative Care*, 21(2), 61-65.

*Letters to the Editor*

6. McLennan, S. (2014). Patient Harm and the Criminal Law. *BMJ*, 5 February 2014: <http://www.bmj.com/content/348/bmj.g133/rr/685320>
5. McLennan, S. (2013). Compulsory apologies are hollow. *Kai Tiaki Nursing New Zealand*, 19(7), 3.
4. McLennan, S. (2013). The 'moral flabbiness' of compulsory apologies. *New Zealand Medical Journal*, 126(1378), 1-2.
3. Nair, S.M., Mishra, P., McLennan, S., Tsao, C-H, Lee, J. & Celi, L.A. (2013). Alcohol related injuries requiring surgery. *New Zealand Medical Journal*, 126(1374), 1-4.
2. McLennan, S. (2013). Low yearly completion of HDC investigations is a cause for concern. *New Zealand Medical Journal*, 126(1369), 92-94.
1. McLennan, S. (2012). WHO's "Clean Care is Safer Care" Campaign: Why Hasn't New Zealand Joined? *New Zealand Medical Journal*, 125(1365), 86-87.

### *Discussion/Working papers*

2. Werding, M. & McLennan, S. (2012). International Portability of Health-Cost Cover: Mobility, Insurance, and Redistribution. CESifo Working Papers Series, No. 3952. <http://www.cesifo-group.de/portal/pls/portal/docs/1/1219553.PDF>
1. Werding, M. & McLennan, S. (2011). International Portability of Health-Care Coverage: Concepts and Experience. The World Bank: Social Protection & Labor. SP Discussion Paper No. 1115: <http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/1115.pdf>

### *Newspaper Articles*

4. McLennan, S. (2013). The forced apology risks putting damage control ahead of sincerity. New Zealand Doctor Newspaper. 17 July 2013, 21.
3. McLennan, S. (2013). Forced apology to a baby excessive and hollow. Otago Daily Times. 4 July 2013, 9.
2. McLennan, S. (2011). Independence of commissioner paramount. Otago Daily Times. 21 December 2011, 19.
1. McLennan, S. (2011). Watchdog or Guard dog – Appointing and HDC. New Zealand Doctor Newspaper. 19 October 2011, 21.

### **Presentations**

#### *Invited Academic Conference Oral Presentations*

1. McLennan, S. (2011). Healthcare workers and influenza vaccination: what is the impact of their personal behaviour on the general public. Invited speaker. Satellite Symposium hosted by the Imperial College London at the Fourth ESWI Influenza Conference, St. Julian's, Malta, 12 September 2011.



*Academic Conference Oral Presentations*

9. McLennan, S. & Truog R.D. (2013). Apology Laws: A Critique. (Presented by Stuart McLennan). International Conference on Communicating Medical Error (COME). Ascona, Switzerland, 21 March 2013.
8. Werding, M. & McLennan, S. (2012). International Portability of Health-Cost Cover: Mobility, Insurance, and Redistribution. (Presented by Martin Werding). Venice Summer Institute 2012: Portability of Social Benefits: The Economics of a Critical Topic in Globalisation. Venice International University, San Servolo, 17 July 2012.
7. McLennan, S. (2012). Accessing Justice After an Adverse Event: An International Perspective. BMBF-Klausurwoche "Behandlungsfehler im Krankenhaus." Bad Homburg, Germany, 13 February 2012.
6. McLennan, S. (2011). Sorry seems to be the hardest word: Open disclosure in Germany. Swiss Patient Safety Foundation International Congress 2011: Patient safety – moving forward! A decade into the 3rd millennium: where do we stand, and where are we going? Basel, Switzerland, 30 November 2011.
5. McLennan, S. (2007). Healer, Heal Thyself: Healthcare Workers and the Influenza Vaccination. The Australasian Association of Philosophy (New Zealand Division) Conference, University of Auckland, Auckland, New Zealand, 4 December 2007.
4. Gillett, G. & McLennan, S. (2007). Broomean All Too Broomean. (Presented by Stuart McLennan). The Australasian Association of Philosophy (New Zealand Division) Conference, University of Auckland, Auckland, New Zealand, 5 December 2007.
3. Carden, G., Graham, J., McLennan, S., Celi, L.A. (2007). Long-Term Outcome of Long Stay ICU and HDU Patients in a New Zealand Hospital. (Presented by Geoff Carden). The 32nd Australian and New Zealand Annual Scientific Meeting on Intensive Care and the 13th Australian and New Zealand Paediatric and Neonatal Intensive Care Conference,

Australian and New Zealand Intensive Care Society and the Australian College of Critical Care Nurses, Rotorua, New Zealand, 26 October 2007.

2. Glasgow, J., McLennan, S., High, K. & Celi, L.A. (2007). Metrics and Quality Improvement in a New Zealand ICU. (Presented by Leo Anthony Celi). The Quality Colloquium, Healthcare Colloquium Conference Series, Harvard University, Boston, United States of America, 22 August 2007.
1. Glasgow, J., McLennan, S., High, K. & Celi, L.A. (2007). Quality of Death in a New Zealand Teaching Hospital. (Presented by Leo Anthony Celi). The 1st International Conference on Safety, Quality, Audit and Outcomes Research in Intensive Care, Australian and New Zealand Intensive Care Society, Queenstown, New Zealand, 8 August 2007.

#### *Professional Conference Oral Presentations*

1. McLennan, S. (2007). The Influenza Vaccination of Healthcare Workers: Ethical and Legal Dimensions. Stuart McLennan. Regional Infection Prevention and Control Day, Otago District Health Board, Dunedin Hospital, New Zealand, 10 May 2007.

#### *Academic Conference Poster Presentations*

2. McLennan, S., Engel, S., Schwappach, D. & Elger, B. (2012). Error Disclosure Standards in Swiss Hospitals. The International Society for Quality in Healthcare's 29th International Conference. Geneva, Switzerland, 22/24 October 2012.
1. McLennan, S. & Wicker, S. (2011). The influenza vaccination of healthcare workers: Time for a new approach. Swiss Patient Safety Foundation International Congress 2011: Patient safety – moving forward! A decade into the 3rd millennium: where do we stand, and where are we going? Basel, Switzerland, 29/30 November 2011.

### *Public Seminars*

5. McLennan, S. (2013). “Apology Laws”: Do they promote open disclosure of medical errors? Harvard Medical School’s Division of Medical Ethics, Harvard University, Boston, 26 November 2013. 1.5 hours.
4. McLennan, S. (2007). O, that I could but call these dead to life! Bioethics Centre Seminar, University of Otago, Dunedin, New Zealand, 14 May 2007. 1.5 hours.
3. McLennan, S. (2006). Healer! Heal Thyself! Bioethics Centre Seminar, University of Otago, Dunedin, New Zealand, 13 August 2006. 1.5 hours.
2. McLennan, S. & Gillett, G. (2006). Running mortal risks without consent? Bioethics Centre Seminar, University of Otago, Dunedin, New Zealand, 13 May 2006. 1.5 hours.
1. McLennan, S. (2006). Preferences regarding serious illness and the end-of-life at Dunedin Hospital. Otago Medical School Research Society, University of Otago, Dunedin, New Zealand, 9 April 2006. 1.5 hours.

### **Teaching**

#### *Seminar Courses*

1. Patient Rights and Healthcare Complaints. Seminar course independently developed and taught for the master program ‘Health Systems and Health Industry’. Faculty of Social Sciences, Ruhr-Universität Bochum, Germany. Winter semester 2010-11 and Summer Semester 2011. 24 hours.

#### *Teaching Contributions*

6. Psyche-Ethik-Recht: Problemorientiertes Tutoriat 2014 [Psyche-Ethics-Law: Problem oriented tutoring 2014] with medical students – Spring Semester 2014, Universität Basel, Switzerland. 8 hours.

5. Lebenszyklen Kleingruppenunterricht Ethik [Life cycles small group ethics teaching] with medical students - Spring Semester 2013, Universität Basel, Switzerland. 2 hours.
4. Bioethics Research: Contemporary Debates - Autumn Semester 2011, Universität Basel, Switzerland. 4 hours.
3. Biomedical Ethics Seminar – Autumn Semester 2011, Universität Basel, Switzerland. 2 hours.
2. Empirical Research in Bioethics: Qualitative and Quantitative Methods - Autumn Semester 2011, Universität Basel, Switzerland. 4 hours.
1. POPLHLTH 746: Ethics, Culture and Societal Approach to Death - 2008. School of Population Health, University of Auckland, New Zealand. 2 hours.

*Co-supervision of Master Students*

2. Martin Diebold. Medical master's thesis: "Swiss Nurses' Perspectives Regarding the Communication of Errors: A Qualitative Study" with Professor Bernice Elger, Universität Basel, 2011-13.
1. Anina Pless. Medical master's thesis: "Attitudes of healthcare workers towards enforced measures to increase influenza vaccination" with Professor Bernice Elger, Universität Basel, 2011-13.

**Organisation**

4. Conference co-organiser: 27th European Conference on Philosophy of Medicine and Health Care 'Innovation in Health Care and the Life Sciences. 14 – 17 August 2013, Basel, Switzerland.
3. Organiser of Bioethics Research: Contemporary Debates. Seminar - Autumn Semester 2012. Institute for Biomedical Ethics, Universität Basel, Switzerland.

2. Organiser of Bioethics Research: Contemporary Debates. Seminar - Autumn Semester 2011. Institute for Biomedical Ethics, Universität Basel, Switzerland.
1. Co-organiser of Empirical Research in Bioethics: Qualitative and Quantitative Methods. Course - Autumn Semester 2011. Institute for Biomedical Ethics, Universität Basel, Switzerland. Part One: 29-30 August 2011. Part Two: 15 September 2011.

### **Professional Services, Development, Community Engagement**

#### *Reviewer of academic manuscripts*

BMJ Quality and Safety, Journal of Vaccine, Journal of Influenza and Other Respiratory Viruses, Healthcare Infection Journal, Drug Discovery Today.

#### *Courses attended*

2. Unreasonable complainant conduct. Australian Parliamentary Ombudsman. Auckland, New Zealand, 21 July 2008.
1. Introduction to the Privacy Act 1993. Office of the Privacy Commissioner. Auckland, New Zealand, 17 July 2008.

#### *Media Interviews*

2. Interviewed by Donna Chisholm regarding the Health and Disability Commissioner. North and South. 6 March 2013.
1. Interviewed by Karen Brown regarding the Influenza Vaccination of Healthcare Workers. National Radio, Radio New Zealand. 2 March 2007.

*Committees*

1. Member of the End-of-life-Decision-Making Committee, Otago District Health Board, Dunedin, New Zealand, 2006-2007.