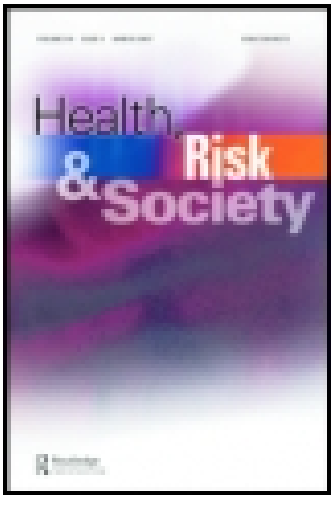


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# Framing and reframing critical incidents in hospitals

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In healthcare systems in high-income countries, critical incidents are increasingly seen as an important indicator of the quality of care. Based on the rationale that there are important lessons to be learnt from mistakes and that insights into critical incidents will help to prevent them from happening again, there is a widespread assumption that conducting inquiries will contribute to improvements in patient safety. In this article, we draw on data from a qualitative comparative case study of three critical incidents in Dutch hospitals in the last decade to examine the ways in which critical incidents are investigated. Through a detailed analysis of the inquiry documentation, we identified four key elements in the inquiry process: how risks were framed and perceived, the type of methods the inquiries used to examine critical incidents, the ways in which inquiries allocated blame and the ways in which they sought to maintain transparency. Drawing on Schön and Rein's work on framing theory, in this article we examined how the key participants in the inquiries framed issues so that they could undertake their work. We found that inquiries are complex processes in which inquiry teams can and do use different frames for deciding who should be involved in the inquiry, what should be discussed, how this should be done and to whom findings of the inquiry should be disclosed. We found that inquiries used professional, managerial or governance frames and sometimes elements of two or more frames coexisted. Within these frames, risk was framed in different ways, leading to different types of actions, involving different groups of actors.

**Keywords:** risk; responsibility; inquiries; (re)framing; patient safety; critical incidents



## Introduction

In this article, we examine the ways in which inquiries into critical incidents in healthcare operate. In the last decade, policymakers and the media have become increasingly concerned about critical incidents in hospitals. Such incidents and their gravity seem to be increasing across most high-income countries, leading to public concerns that the standard and safety of health and social care are deteriorating. For example, in the Netherlands, there has been a high-profile inquiry into the high-mortality ratio in a university hospital; the investigation into the poor conditions of care in the Mid Staffordshire NHS Foundation Trust in the UK has attracted international coverage. In this article, we examine how inquiries of critical incidents in hospitals get framed and how such framing provides insights into conceptual thinking and the dominant perspectives of the actors involved.

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## Inquiries into critical incidents

### *Inquiries as a way of managing risk*

Mary Douglas, a social anthropologist and major risk theorist, noted that the perception of risk has changed over time from a balance of outcomes to an emphasis on danger. She argued that the assessment of risk and hazards is necessarily grounded in the objective and rational assessment of evidence but is shaped by social and cultural selection processes (Douglas, 1990, 1992). So, risk assessment and perception are social processes. Social contexts shape the selection of risk and the attribution of the responsibility for the management of such risk to individuals and groups. Social arrangements influence which risks are identified or neglected, and the type of institutions used to deal with perceived threats to social and individual well-being (Douglas & Wildavsky, 1982). The sociologist Charles Perrow emphasises that in a society with high-risk technologies we have to deal with new categories of accidents (Perrow, 1999). In complex industrial systems, it becomes more likely that something will go wrong. Perrow identifies this as a 'normal accident' and argues that, because of the increased system complexity, failures are inevitable.

Risk can be seen as a 'modern' and rational way of managing uncertainty. When uncertainties, which are characteristic for critical incidents, become 'organised', they become a risk to be managed (Power, 1994, 2007). Even when risk assessments may not be directly 'auditable', the managerial process in which they are embedded can be. In this way risk can be perceived as a consequence of organisational processes. Alaszewski and Brown used the term 'blame culture' when referring to ways in which in contemporary societies 'harmful events are seen as a product of human agency and every misfortune is someone's fault' (Alaszewski & Brown, 2011). This results in the need to allocate blame after an incident has occurred and emphasises the importance of identifying and preventing risk. So, critical incidents in healthcare shift from private misfortunes to public events that need to be accounted for especially as the media acts to amplify such adverse events. By becoming a 'public disaster', incidents influence policymakers' control over the situation and often force them to conduct an independent inquiry in order to regain control and re-establish public confidence in government (Alaszewski & Brown, 2011). While others have, for example, investigated the 'ritualised' character of such inquiries (Wynne, 1982) or their frequency and relative openness (Alaszewski & Brown, 2011), we are interested in the ways in which inquiries frame the issues they investigate.

### *Critical incidents in healthcare*

Since the publication of the Institute of Medicine's (IOM) report 'To err is human' in 1999, stating that medical errors are the fifth leading cause of death in the US, more attention has been paid to critical incidents in healthcare (Kohn, Corrigan, & Donaldson, 1999). The awareness of threats to quality and patient safety has increased and gained prominence in other countries as well. In Europe, the UK had a history of conducting public inquiries (Black & Mays, 2013) and took the lead in developing the practice of reviewing critical incidents and hospital fatalities. An early formal report, on the incident at Ely Hospital (1969), was followed by inquiries such as the Bristol Royal Infirmary Inquiry (1997) and the Mid Staffordshire Inquiry (2013). A similar approach to inquiries has emerged in the Netherlands. Inquiries fulfil an important role in the intense debate on hospital fatalities by analysing the causes of critical incidents and allocating responsibility.

As Alaszewski and Brown (2011) have noted, inquiries have become a routine part of health and social care, and while the stated objectives are to identify why things have gone wrong and recommend ways in which they can be improved, they may have other unanticipated consequences, such as the development of defensive practice. While commentators have generally accepted the position of the IOM report, that investigations should focus on improving service quality and therefore shifting the *culture of blam*e in health and social care systems into a *culture of safety* (Bruun Jensen, 2008), a systemic approach was accentuated, which has in practice been difficult to achieve. Despite the recommendations of many commentators that inquiries should focus on system failures, the literature suggests that critical incidents (e.g. see Kohn et al., 1999; Shojania, Wald, & Gross, 2002) tend to highlight the roles that individual actions and decisions play in adverse events and therefore allocate blame. These inquiries can have adverse effects, such as reducing the willingness of staff to report critical incidents, influencing the ways in which individuals write their clinical notes to protect themselves from blame and leading to a deterioration in communication (Dunbar, Reddy, Beresford, Ramsey, & Lord, 2007). So, it is important to examine the ways in which inquiries are conducted to investigate how this affects the ways in which they make sense of error and risk and how this shapes their findings and recommendations.



### *Framing*

In this article, we draw on the concept of framing, initially developed by Goffman (1959) and refined by Schön and Rein (1994), to examine the ways in which inquiries construct and define patient safety and risk. Goffman argued that framing determines how actors perceive reality. A frame represents a collective perspective and makes it possible for actors to agree upon the interpretation of facts and reach consensus (Goffman, 1959). Schön and Rein have used the concept of framing to reflect on the ways in which different actors' perspectives or frames interact and, when they are different, how differences are resolved. They argued that policy controversies can be seen as disputes in which contending parties hold conflicting ideas which are 'resistant to resolution by appeal to facts or reasoned argumentation because the parties' conflicting frames determine what counts as fact and what arguments are taken to be relevant and compelling' (Schön & Rein, 1994, p. 23). Such frames are constructed from and interact with social reality, and this determines how individuals and groups select and organise information. By selecting information and building stories around this information, policy actors construct specific meanings. Frames are often built on general metaphors and their diagnostic-prescriptive functions attribute them with normative power (Schön & Rein, 1994). In this article, we see frames as a way of understanding how different inquiries were conducted and how they reached their conclusions.

### *Analysing inquiries: frame theory versus root-cause analysis*

In this article, we use frame theory to analyse how inquiries operated. Generally the work on inquiries into incidents and accidents focuses on approaches such as root-cause analysis. This approach is positivistic; it is based on an assumption that there is an objective set of facts (root causes), which, if properly accessed and analysed, will explain why things went wrong. This approach is not appropriate for our purposes. We are not aiming to provide insights into the causes of the incidents in the cases that are the focus of this article; rather we are aiming to understand the process by which inquiries decided that

some phenomena were facts relevant to the problem at hand (and by implication others were not). We seek to understand why those involved in the inquiry chose to frame the issues and evidence in a particular way. Therefore, in this article, we aim to examine how framing affects the analysis of critical incidents in healthcare (in the hospital sector) and the types of frames that are used by inquiry teams. Given there are alternative possible frames, we aim to examine how the frames we identify relate to each other and the consequences of reframing critical incidents in hospitals.

## Methods

In this article, we draw on qualitative case studies of three inquiries into critical incidents which occurred in hospitals in the Netherlands during the last decade. These case studies provide an appropriate source of data as this research design enables researchers to 'investigate a contemporary phenomenon within its real-life context and address a situation in which the boundaries between phenomenon and context are not clearly evident' (Yin & Campbell, 2008, p. 13). We selected significant cases that can be seen as turning points in thinking about critical incidents and the scope of the inquiries. While they are important cases, they also follow the 'standard' practice of the time and are therefore 'typical examples' (Leezenberg & Vries de, 2010) that can be used to explore the tacit knowledge of team members. The selected cases represent characteristic inquiries conducted according to different prevailing standards, between 2001 and 2010, of how incidents in healthcare should be examined. We have chosen a comparative case study design as it meets our explorative research question. By using multiple sources to obtain information for our analysis, that is, semi-structured interviews, records and document analysis, we were able to triangulate different types of data. With a small number of cases, applying diverse research methods can enhance internal validity (Mortelmans, 2009; Yin & Campbell, 2008). Beside the conscious choice for our cases, we applied additional selection criteria:

- All cases mentioned adverse health effects or even caused the death of patients.
- The investigated critical incidents happened between 2000 and 2010.
- All critical incidents received media attention, caused public concern and initiated a political debate.
- All incidents were reported to the Healthcare Inspectorate.
- All incidents led to both internal (commissioned by the hospital) and external (conducted by independent advisory bodies or the Inspectorate) inquiries.

Although media attention was applied as a selection criterion, the (in)direct and potential consequences of media publications are not the main subject of study in this article.

We selected three cases for analysis. The first case (2001–2002) concerned an unexpected death after coronary angiography in a children's hospital. The second case (2005–2008) involved increased mortality within the cardiothoracic department of a university hospital. The third case (2009–2010) focused on the functioning of a neurologist in a general hospital. Preceding the document analysis, semi-structured interviews ($n = 3$) were held with inspectors of the Inspectorate who were involved in the inquiries. The interviews were recorded and transcribed to ensure respondent validation (Mortelmans, 2009). Taking into account the main topics which emerged from the interviews, a document analysis for the selected cases was conducted. The included documents were

- reports of internal and external committees of inquiry
- records of the Inspectorate (including court rulings and newspaper articles)
- policy documents

We analysed the documents through open and axial coding which led to the identification of matching attention points in the included research material. Using inductive analysis, we selected four common themes in the investigated inquiries. The themes played an essential role in all cases, but had different meanings depending on the prevailing views of the involved actors. The first two authors analysed the data, and their analysis was discussed with and verified by the second two authors. To illustrate views and opinions of actors in the conducted inquiries, we use quotes in the article; if the information is not in the public domain, then we anonymise the source using pseudonyms. We used the themes in the inquiries, identified in the analysis to discern the different policy positions of actors and subsequently to construct specific action frames.



## *The three cases*

In this subsection, we give a brief explanation about the backgrounds of the three selected cases for our study.

### *Death of a baby*

Our first case is based on the unexpected death of a baby in a children's hospital. The baby had a congenital heart defect but died unexpectedly as a result of coronary intervention. Due to an underlying conflict between doctors, the supervisor withdrew from the procedure, the treatment team had a different staff composition than originally planned. There were unanticipated difficulties during a coronary angiography procedure, and the medical team unsuccessfully tried cardiopulmonary resuscitation.

The hospital initiated two inquiries following the incident. The first inquiry (Büller, 2001) was chaired by a professor of paediatric medicine from another university hospital. The inquiry report does not specify the composition of the inquiry team, so this information was not in the public domain. In its report the team described the organisational context of the events and how this influenced the adverse outcome. However the main emphasis was on the role and responsibility of individual clinicians. The second inquiry was conducted by an external consultancy agency (Elephas Consulting, 2001). This report was not published in full and mainly focused on system failures including organisational problems, poor peer relationships and damaged collaboration between medical staff and management. The report stated that

> Specialists tend to take a (…) superior attitude. The managers are now looking to support each other and seem to have given up any attempt to have a dialogue with the medical specialists. (Elephas Consulting B.V., 2001)

Following the publication of these reports, the Healthcare Inspectorate decided to investigate. This inquiry report was published in 2002 (IGZ, 2002). Apart from checking whether hospital management implemented recommendations from previous inquiries, the Inspectorate focused on disciplinary measures taken against the clinicians named in the earlier reports. The Inspectorate judged the earlier report as sufficiently robust and stated that they did not need to become involved any further:

> …the IGZ [Inspectorate] is of the opinion that, regarding its responsibility for the quality of care, there is no reason to bring one or more the clinicians involved before a disciplinary board. There is no chance that they will be involved in such adverse events again and they are fully aware of the culpable nature of their unprofessional attitudes. (IGZ, 2002)

Although the Inspectorate closed the file on this case, the legal processes continued. The legal representative of the baby's parents continued to call for full publication of all the evidence and for further disciplinary action against the clinicians. Using the media, the lawyer representing the parents gained political support for his argument that the lack of full disclosure of the inquiry report was having an adverse effect on the quality of the care and patient safety. This political pressure resulted in the public prosecutor prosecuting one of the doctors, who was found guilty of manslaughter (IGZ, 2004).

*High-mortality rate*

The second case study involved an inquiry into cardiothoracic treatment at a university hospital. The process started with a policy meeting of the hospital staff in 2005. At an initial meeting, the staff discussed morbidity and mortality data for 2004–2005. The data from the national registration system indicated that the mortality rate in this hospital was more than twice as high as in other comparable heart clinics (Dutch Safety Board, 2008; IGZ/UMC St Radboud, 2006). The professor of cardiothoracic anaesthesia shared his concern about these results with the medical team. In an email, he stated that the current standards of care were inferior and that staff members needed to improve the quality and safety of their care. This internal message was sent anonymously to the Healthcare Inspectorate and the media, and one of the national newspapers wrote an article including the following statement:

> One of the professors in charge of the department has identified very serious problems in the quality of the provided care. 'I would not undergo a surgical procedure here', stated the professor. (Newspaper *Algemeen Dagblad* 29/09/2005)

After this newspaper coverage, politicians raised questions in Parliament. As a result, an external inquiry was ordered by the Inspectorate and conducted in collaboration with the hospital. This inquiry, commissioned by the Inspectorate, resulted in the immediate closure of the department. In the course of the inquiry, the whistle-blower was suspended and all members of the board of directors and the supervisory board[1] of the hospital were fired.

There had been two internal inquiries (Internal committee, 2005; Ruys-van den Broek, 2004), before the media coverage and the Inspectorate investigation. Neither of these found any serious problems (Dutch Safety Board, 2008) suggesting that increased mortality rates were the result of the quality of the provided care.

The Inspectorate's inquiry (IGZ/ UMC St Radboud, 2006) rejected the claim that increased mortality rates were due to higher risk profiles of the patients who had surgery:

> It can be concluded that the perception of the [high] risk profile is based on conjecture instead of numbers. (IGZ, 2006)

The title of the Inspectorate's report, 'A failing care process', was significant. The main conclusion of the report was that the increased morbidity and mortality rates could not be assigned to faults of individual professionals or a specific discipline, but were attributable

to a badly functioning system of care. The inquiry report noted that the board of directors should have been aware that professional and organisational problems were jeopardising the quality of the care. There was a second external inquiry by the Dutch Safety Board (2008), an independent council with the legal authority to investigate incidents. This inquiry focused on the failures in hospital management but also noted that the Inspectorate inquiry had been too trusting and passive.

*A dysfunctional neurologist*

The third case started out with signs of poor performance of a medical specialist in a hospital setting. Over a period of several years, this doctor was involved in cases of misdiagnosis, unnecessary treatments and misuse of prescriptions, indicating problems that raised questions about his professional performance. The local media published reports about the doctor's poor performance that alerted politicians, healthcare insurers, and the Inspectorate to a potential problem. The investigation process started with two inquiries undertaken by an independent commission appointed by the hospital board (Lemstra I, 2009; Lemstra II, 2010). Both inquiries found that there were problems in the clinician's practice, but these had been tolerated in his professional working environment, thereby jeopardising patient safety. The inquiry teams defined the professional work environment as the clinician's relationships and interactions with fellow neurologists, the board of the medical staff, the board of directors of the hospital and scientific associations:

> The damage [the conduct of a dysfunctional medical specialist] would have been significantly less substantial if the directly involved actors [professionals and managers] had taken responsibility for the quality of care. (Lemstra I, 2009)

The inquiries found that patients had been at risk of mistreatment for a long period of time and that the clinician's medical colleagues and directors of the hospital board were aware of these hazards but had taken no action. There was also criticism in the local media of the hospital board's failure to take action.

During the period covered, the inquiry team found that the management of the hospital had been restructured and the change in leadership meant that vital information was lost. They noted that in this changing environment the hospital board had become preoccupied with cutting costs and had paid less attention to the quality of services:

> Partly due to this long-term administrative disruption [changes in the management staff of the hospital], the management of the organisation concentrated on addressing urgent matters for most of the time and these apparently did not include quality and safety of care. (Lemstra, 2010)

Following these two inquiries, the Minister of Health bypassed the Healthcare Inspectorate, an implied criticism, and commissioned another inquiry (Hoekstra, 2010). In this report, the minister's inquiry team noted that the Inspectorate had been too slow to act and when it did it was not sufficiently critical of expert testimonies:

> They [the Inspectorate] relied for a long time, really too long, almost blindly on what healthcare professionals and managers presented (often on request). They should have been more aware of information provided by patients and involved citizens… (Hoekstra, 2010)

Although there had been public concerns about the clinician's performance, it took several years for his employing hospital to terminate his contract. After that journalists found that the doctor was still practising in Germany. These investigations resulted in the termination of his employment in Germany and the start of legal action which resulted in his conviction in 2014 and a 3-year prison sentence. In the European Parliament, concern was expressed about this case, demanding action to protect patients from dysfunctional healthcare professionals who sought to continue working by moving to other EU states.

## Findings: common themes in the inquiries

Several themes played a crucial role in these inquiries conducted into critical incidents. By comparing the cases, we found that the themes – risk perception, evaluating critical incidents, allocation of responsibility and transparency – emerged and developed, in meaning and effect, over time.



### *Risk perception*

In our first case study, the inquiry reports focused on risks defined as complications of treatment, which exclusively belonged to the competence of medical professionals. Organisational issues and communication problems were placed in the medical domain. In the second case, there was a focus on the managerial level, and organisational circumstances were generally assessed to be the biggest risk. This development is even more explicitly reflected in our third case. Here patient safety was presented as a managerial as well as a governance issue. The titles of the different inquiries substantiate this shift in meaning. In the first case, inquiries had no title or only referred to medical details of the critical incident. In the second case, an inquiry titled 'An incomplete administrative process' can be seen as indicating how the responsibility to manage risks is perceived. A shift in the perception of risk is again clearly recognised in the third case, where inquiries emphasised that failures of hospital management and the Inspectorate were a risk to vulnerable patients. Titles such as 'And where was the patient…?' and 'The patient as a whole' underline that, in addition to professionals, many other actors are seen to have failed to prevent risks and so have jeopardised patient safety.

Our analysis of the inquiries demonstrates a shift in the assessment of risk. In our first case, the individual doctor was judged to be a disfunctional professional. Risks were identified as problems of professional competence. In the second case, the scope of risk expanded; here risks were mainly perceived to be caused by managerial and organisational failures. In this view, risk was embedded in organisational circumstances outside the medical domain. In the third case, risk was framed as both embedded in the (in)competence of an individual clinician and in failures of systems. Not being able to identify dysfunctional clinicians went beyond the responsibility of the individual employing hospital and was even addressed at the level of European regulation. So, in the three cases, there was an increasing scope in terms of assessing risk, ranging from the individual clinician, to the hospital system in which the clinician works, to the (European-wide) governance level.

### *Evaluating critical incidents*

In the three case studies, different methods were used to investigate critical incidents. This reflected the increasing complexity of the inquiry process, resulting in multiple inquiries

in later cases and an increasing diversity of team members. In the initial case, the problem was framed as a medical error and therefore the committee members were doctors who could be expected to have the expertise to define such a problem and analyse its causes. As the scope of the inquires broadened to systems failures and governance issues, the teams included a broader range of individuals, including those with management and organisational expertise. A trend which further developed with the increased involvement of the Dutch Safety Board, whose remit was only extended to include healthcare in 2008, and who traditionally focused on risk and safety issues in industries such as aviation and construction. The changing composition of inquiry teams reflects the changing focus of the inquiries from the micro level (individual clinician), through the meso level (hospital systems and management), to a macro level (societal governance of healthcare). The change in composition of the inquiry committees was accompanied by the alteration of the focus of investigation from a focus on the causes of specific critical incidents to inquiries that examined why systems had failed to detect dangerous practices. The use of social and political science expertise enabled inquiries to identify new issues and actors on a system level. This system approach includes supervisory bodies and scientific organisations as part of the object of the inquiry.



### *Allocation of responsibility*

The inquiries in the first case focused on the activity and competence of the individual doctor, as did the assignment of accountability. The suspension of the doctor and the subsequent criminal proceeding placed the doctor at the centre of the incident and as the prime cause of risk. The inquiry by a consultancy agency did find organisational failings but the hospital board and the Inspectorate focused their actions – and responsibility for the events – on the treating clinician.

In the second case, the inquiries blamed not just the individual doctor but the whole management of the hospital. Having identified increased mortality associated with the practice of a number of clinicians, the inquiries examined why those responsible for the quality of care received by patients in the hospital, that is, the hospital board, had failed to identify the problem and take action:

> The board of directors is ultimately responsible for and entrusted with the management of the care organisation… More specifically, the board of directors is responsible for controlling the risks associated with the activities of the care organisation. (Lemstra, 2010)

The inquiries blamed those responsible for managing the hospital for a lack of attention to patient safety and acting as if only doctors were responsible for the quality of the provided care. The inquires criticised the board for prioritising the avoidance of reputational damage over patient safety.

In inquiries in the third case, there appeared to be an even broader scope of evaluation with regards to allocating responsibilities. Without ignoring professional conduct and the obligations to give substance to this accountability, inquiries were no longer restricted to a specific hospital but were related to the wider healthcare system. This was reflected in the role which the inquiry team ascribed to medical associations and the Healthcare Inspectorate:

> It is important that scientific associations ensure that substantive recommendations regarding the quality of care are implemented adequately and expeditiously by the concerned

> partnership/department and hospital. If this does not happen, then there is a risk of harm to patients. It is the social responsibility of scientific associations to increase pressure and, if this does not help, to inform the IGZ [Inspectorate]. (Legemaate, 2009)

The ways in which inquiries framed risk shaped who was involved in the inquiry team, how they conducted the inquiry and ways in which they ascribed responsibility and blame between the different components of the healthcare system.

### *Transparency*

In this article, we consider transparency in terms of publication and accessibility of the inquiry process and findings. In the first case, the hospital board decided that disclosing information would not contribute to improving the quality of the provided care and could even undermine this process. The hospital managers refused to allow public access to the results of the inquiry. The lawyer acting on behalf of the baby's parents used this refusal to campaign for full disclosure arguing that there was a 'conspiracy of silence' (Maassen, 2002). He was acting against the prevailing view that publication of the inquiry could have a disproportionately negative impact for those named in the report and would not contribute to an improvement of the quality of care. For example, the Healthcare Inspectorate stated that

> …the importance of public disclosure does not outweigh the interests of the employees [and the hospital] involved in the case of baby Floor. (IGZ, 2000)

At this time, the relationship between the hospital and the Inspectorate did not involve full exchange of information. The Inspectorate only received copies of the inquiry reports that had been redacted with the removal of names. Since hospital managers framed the baby's death as a medical error, and the inquiries were conducted by medical peers, the hospital stated that the full report should only be available to medical professionals and the board of directors of the hospital. This approach was grounded in the dominant medical paradigm, in which non-experts did not have a right to the information. The legal challenge based on public indignation about 'medical cover-up' was one factor in the reframing of subsequent inquiries and their reports as being in the public, not just medical, interest.

In the second case, the whole process was more critical and less deferential and there was broader participation particularly when bodies such as the Dutch Safety Board articulated criticism of the existing system of investigations not being proactive and critical while conducting inquiries. Acting too passively and trusting too easily raises criticism:

> Regarding the UMC St Radboud, the IGZ [Inspectorate] worked from a predominantly responsive position and proved, with regard to its performance, to be almost entirely dependent on information provided by the institution involved in the inquiry. (Dutch Safety Board, 2008)

The Dutch Safety Board was critical of other participants who failed to investigate and identify developing problems, for example, the medical associations responsible for ensuring medical competence:

> In late 2009, the Dutch Order of Medical Specialists… made a rather modest move by not restricting inspection reports exclusively to their own profession, but presenting them to the board of directors [of the inspected hospitals] as well. (Hoekstra, 2010)

The third case demonstrates that the concept of transparency can be interpreted in different ways. By increasing the range of actors that were held accountable for the critical incident, the demand for transparency reached national and international levels. Not only medical professionals, but the hospital board and the Inspectorate were expected to give the media and the general public insight into their performance and make their actions accessible to control mechanisms. Inquiries show that the Inspectorate was increasingly becoming the subject of investigations and was being asked to publically account for its performance. While those involved in the inquiry judged that it was transparent when the inquiry was undertaken by medical experts and its conclusions were shared within the medical profession, in the later cases this definition of transparency, based on an implicit trust in the medical profession, was no longer tenable. Neither the profession nor the institutions that employed, regulated or supervised the delivery of healthcare were trusted, and they needed to publicly account for their actions.



### *Frame construction and reframing*

Where the inquiries involved both individual healthcare professionals and institutional actors, we can identify multiple levels of relevant regulation and different systems of shared values. The themes relate to policies in a specific way. While the inquiries of the selected cases showed significant similarities, they also revealed important differences. Analysing the common themes and actors' policy positions with regards to patient safety led us to identify three action frames: a professional frame, a managerial frame and a governance frame.

### *Patient safety as a component of professional practice*

Within a professional frame, there is a strong emphasis on the individual professional level. Inquiries using this frame focus on the patient care process and evaluate critical incidents from a medical perspective. Implications of this perspective are expressed by the prominent position of the medical discipline and are accompanied by conclusions of the inquiries which focus on professional competence. Consequently, the inquiries can be executed (only) through peer review, as in the inquiry of the unexpected death of a baby in the first case and the internal inquiries into the high mortality rate in the second case.

In terms of the definition and source of risk, these are seen as coming from the dangerous actions of specific doctors. In this frame, there is awareness of the role of organisational structures or communication failures, but these are subsumed under professional activity and not seen as independently influencing the quality of care or creating risks. So, risk is framed as a medical entity dependent on the conduct of individual doctors. Given this emphasis on medical competence, there is a strong preference for allocating the responsibility to a medical specialty for managing its own affairs. The actions of the doctor should be judged by his or her peers who should agree with him on the remedial action required. In our first case, the clinician at the centre of the inquiries was initially prevented from undertaking specific procedures and later suspended from practice. Even his subsequent criminal prosecution and punishment can be framed within the context of personal and professional responsibility.

In this framing of the problems, there is no need for disclosure of information outside the medical domain as it could and should all be managed behind closed doors by the profession who could and should be trusted to self-regulate. In a professional frame, the investigation of critical incidents through peer review is 'good practice'.

### *Patient safety as a managerial issue*

In this frame, there is a strong emphasis on the role of managers and management in ensuring patient safety and maintaining a high quality of patient care. Managers as well as professionals are responsible for monitoring and controlling risks. So, the role of managers, especially those in leadership positions such as the members of hospital boards, is not only to create conditions that will increase levels of patient safety, but seek information about the possible hazards to patients and take prompt action to prevent such hazards causing harm.

In evaluating critical incidents, a number of inquiries in the second and third case included organisational circumstances that created the precondition for incidents. Such broader circumstances lie outside the area of expertise of medical practitioners, and so these inquiries draw on expert knowledge from disciplines such as business administration. The involvement of the Dutch Safety Board acted as a catalyst for inquiries widening the framing from clinical error to underlying managerial and organisational failures.

Thus, in the second case, the scope of disciplinary action was extended to hospital management with the dismissal of the whole board of directors as well as the supervisory board of the hospital which appointed and should have supervised the directors. The inquiries broadened the scope of blame allocation and disciplinary actions from clinicians who had poor clinical outcomes to hospital managers who had failed to identify these poor outcomes and did not take action to protect the safety of patients.

In terms of publication of the findings, there was a move towards greater transparency both in reports not only being made available to doctors and hospital managers, but more especially publication of information about the (in)actions of managers to the public (Dutch Safety Board, 2008). So, those responsible for managing and ensuring the quality of services were increasingly required to account for their actions in public. This included hospital boards as well as the Healthcare Inspectorate.

### *Patient safety as a governance issue*

In the third case, there is evidence that risk is no longer an issue of (incompetent) clinicians or (negligent) managers but is an issue of broader governance of healthcare as there are national agencies which provide the guidelines, regulations, procedures, and resources which shape the management and delivery of health services.

Within this broader framework, inquiries explore not just the role and concern of clinicians and local managers, they also investigate the extent to which other, national, participants are involved. Medical associations that set the standards for and ensure the training of clinicians, the Healthcare Inspectorate who should respond to emerging evidence of failings and other government agencies are held responsible for the quality of healthcare. As a consequence, there is also a shift from embedded knowledge, such as professional custom and practices, to knowledge encoded in national standards, guideline and protocols.

In this broader approach to identifying what has gone wrong, there is a commitment to the full disclosure of all relevant information. Hence, in the third case, inquiries published

all the evidence and their complete findings so that there is full transparency and the public can have confidence in the inquiry process with no information being hidden.

## Discussion

Although it is difficult to assess the impact of inquiries on the quality of care and safety of patients (Black & Mays, 2013), there is evidence that in high-income countries inquiries into hospital fatalities and medical failures have become routine (Alaszewski & Brown, 2011). As we found in the Netherlands, not only has the number increased, so has their scope and transparency. The inquiries are no longer just concerned with the failures of individual clinicians but also managerial and even broader governance failures, and their target audience is no longer health professionals but includes local managers and national bodies such as the medical associations as well as the media and the general public.

In our analysis of the inquiries relating to the three cases, we found three types of action frame: a professional frame, a managerial frame and a governance frame. These action frames highlight the different aspects of risk (Table 1). The framing of the risk starts with the selection of the inquiry committee. As Black and Mays have noted, 'it is striking how little attention seems to be given to the selection of the membership, methods and process of public inquiries in the UK' (2013, p. 130). Our findings indicate that the composition of the inquiry teams influences how issues are framed; the inquiries in the first case were conducted by medical experts who focused on medical errors of the clinician, whereas the inquires in the second and third case had a more diverse membership including experts with social and political sciences backgrounds, who placed the failings of individual clinicians within a broader context. So, the ways in which inquiries framed issues influenced how committee members approached their work, especially what they saw as the main source of the problem; the clinician, the organisation or the broader healthcare system. In Table 1, we summarise the key features of each of the frames.

We found that inquiries tended to adopt a particular frame as such frames enabled inquiry team members to create a shared approach and understanding. The identified frames can be characterised by common values and beliefs of the involved actors. In this way, actors agree on how the inquiry should be conducted, who should be involved and to whom conclusions and recommendations should be made available. If there is no common frame, and there are no mutually accepted structures and shared values, then the participants will not reach a consensus and there will be conflicts over which frame to apply (Schön & Rein, 1994). In this situation, elements of different action frames can be observed that develop to the extent and the frequency in which they are applied. This is

Table 1. Key elements of each frame.

| | Professional frame | Managerial frame | Governance frame |
|---|---|---|---|
| *Themes* | | | |
| Risk perception | Professional misconduct | Managerial failure | Systemic risks |
| Evaluating critical incidents | Peer review | Administrative approach | Sector/ system approach |
| Responsibilities | Professional level | Organisational level | Sector/system level |
| Transparency | Open to the medical profession | Open to hospital management | Open to all stakeholders |

shown in the first case, where there was a strong emphasis on individual disciplinary ruling, whereas in the third case conclusions focused on the performance of the hospital management and the Healthcare Inspectorate and only secondarily on individual disciplinary measures. In practice, it was possible for frames to coexist as they could encompass each other; for example, the professional frame with its emphasis on professional error could be part of the managerial frame with its failure of management to identify professional errors which in turn could be encompassed within the governance frame in which the overall governance systems fail to identify professional and managerial failure.

However, a major conflict of frames can lead to a paradigm shift that changes how risk is understood. For example, the legal and media scrutiny of inquiry findings in the first case meant that it was no longer possible or acceptable for medical errors to be seen as the isolated action of a 'rogue' practitioner but such error was seen as a product of system and governance failures. However, this shift to a broader approach to errors and risk and in particular to full transparency may have unforeseen consequences. Strathern (2000) has noted that professionals do not use just knowledge encoded in protocols and guidelines but also need to use clinical experience and tacit knowledge. A system based wholly on a governance approach, that is, one that judges how and when clinicians depart from guidelines, will fail to capture the reality of events and decision making. Similarly, the growing and routine use of inquiries may engender a sense that such incidents are increasing and diminish public confidence in the healthcare system (Robben, Bal, & Grol, 2012). It is possible that disclosure, especially if it is 'hyped' in the media and taken out of context, undermines patients' trust (Tsoukas, 1997).

Given that we, in this article, have drawn on a limited number of cases, it is difficult to generalise our findings beyond these three cases. More research is needed to see whether the dynamics of the frames temper each other or lead to new action frames. By conducting longitudinal research on inquiries, it will be possible to draw conclusions through time. We see our research as exploratory and as an early attempt to understand the relevance and meaning of identifying different action frames underpinning the ways in which different inquiries have been conducted.

## Conclusion

Our analysis of critical incidents in hospitals aims to contribute to an understanding of how inquiries are conducted and assessed. Besides a growing number of inquiry reports through time, we see a shift from internal to external inquiries (Table 2). In this article, we identified three ideal types of action frames – a professional frame, a managerial frame and a governance frame – which influence conceptual thinking and give meaning to the situation of the critical incident. All frames are built on underlying structures, common values and beliefs of the involved actors. Depending on actors' policy positions, the frames demonstrate prevailing views regarding the way risks in healthcare are assessed, the methods that are used to evaluate critical incidents, the choice of actors who are assigned blame and responsibility, and the changing perspective in reference to value transparency. We found that many of the inquiries did not represent one specific frame but included characteristics of all three frames and that more encompassing frames seemed to develop in later time.

The inquiry system is based on the overall assumption that an investigation of a critical incident will identify its causes and so enable individuals and organisations to make changes that will prevent a repetition of the same error. However, we have noted that different inquires framed the underlying problem in various ways and this has shaped

Table 2. Chronological outline of the conducted inquiries into the three cases.

| Case I Death of a baby, Children's hospital (UMC Utrecht -Wilhelmina Kinderziekenhuis (WKZ)) | Case II Increased mortality rate, University hospital St Radboud (UMC St Radboud) | Case III Dysfunctional neurologist, General hospital (Medical Spectrum Twente (MST)) |
|---|---|---|
| Internal Inquiry 2001<br>Conducted by the committee Büller<br>Report: *Research committee incident WKZ Child's heart centre*<br>Initiated by the hospital[2] | Internal inquiries 2004<br>Conducted by Ruys-van den Broek<br>Report: (confidential, no public access)<br>Initiated by the hospital | External inquiry 2009<br>Conducted by the committee Lemstra I<br>Report: *And where was the patient…?*<br>Initiated by the hospital |
| Internal Inquiry 2001<br>Conducted by Elephas Consulting<br>Report: *Organizational study Child's heart centre*<br>Initiated by the hospital | Internal file inquiry 2006<br>Conducted by File committee mortality heart surgery<br>Report: press release 07/04/2006<br>Initiated by the hospital | External inquiry 2009<br>Conducted by the Inspectorate<br>Report: *Research report Inspection acts concerning a neurologist in Twente*<br>Initiated by the Minister of Health |
| External inquiry 2002<br>Conducted by the Inspectorate<br>Report: *Final report of the IGZ in the case baby Floor*<br>Initiated by the IGZ | External inquiry 2006<br>Conducted by the Inspectorate and the hospital<br>Report: *A failing care process*<br>Initiated in collaboration IGZ/ UMC St Radboud | External consultancy assignment 2009<br>Conducted by Legemaate *et al*.<br>Report: *Take responsibility for quality*<br>Initiated by the Minister of Health |
| | External inquiry 2008<br>Conducted by the Dutch Safety Board<br>Report: *An incomplete policy process*<br>Initiated by the Dutch Safety Board | External inquiry 2010<br>Conducted by the committee Lemstra II<br>Report: *The whole patient*<br>Initiated by the hospital |
| | | External inquiry 2010<br>Conducted by the committee Hoekstra<br>Report: *Sting and Antenna*<br>Commissioned by the Minister of Health |

how inquiry teams approach their work and how they present their findings. The frames relate to patient safety in a specific manner and reflect on how inquiries into critical incidents are evaluated. We argue that the frames should not be interpreted as intrinsically incompatible, but can perform different functions and so serve the transfer of knowledge and critique institutional arrangements. Frames can interact with each other and still represent their own characteristics. The frames should be evaluated using the prevailing norms and standards at the time they were conducted. That means that new information or changing views should not be projected on the earlier critical incidents without careful consideration. The frames relate to each other, but can also initiate frame conflicts and so

cause reframing. Persistent frame conflicts lead initiate reframing. We emphasise that reframing is more than a symbolic battle about how we should understand critical incidents; it has far-reaching implications for what is identified as the object of study, which actors are involved, assigning blame and responsibility and to whom conclusions and recommendations are open.

Awareness of action frames can improve our understanding of how actors perceive the reality in which critical incidents occur and are evaluated. We theorise that applying concepts of framing and reframing contributes to our understanding of how risk and patient safety is structured by means of different action frames and how it has changed in the last decade. Reasoning from the premises that conducting inquiries provides us with insights and enables us to learn from mistakes, awareness of action frames embedded in inquiries is crucial with respect to what exactly we might learn from them.

## Disclosure statement

No potential conflict of interest was reported by the authors.



## Notes

1. The supervisory board is part of the dual board system. The supervisory board is involved in long-term policymaking and supervises the performance of the board of directors. It is responsible for selecting (and dismissing) members of the board of directors and intervening in case of mismanagement.
2. All original Dutch titles of the reports have been translated in the text.

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