Management of Medical Risk and Displays of Physician Competence
The Case of Emergency Medicine

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ABSTRACT: This article first describes the unique place of emergency medicine (EM) within the American healthcare system. Second, it examines the uncertainty that underlies the practice of emergency medicine. It then describes how risk is perceived, negotiated and minimised by emergency physicians in their day-to-day practice. Finally, it explores how the management of medical risk is related to the establishment of trust within the physician–patient interaction and to the construction of the 'competent physician'. In caring for patients, the emergency physician must minimise risk and instil trust within a pressured, time-sensitive environment. Consequently, the management of risk and display of competence to patients are simultaneously accomplished by symbolic representations, the use of medical diagnostic tools in decision-making, and narrative construction within the clinical interaction.

KEYWORDS: emergency medicine, medical risk, patient care, physician competence, risk management

Introduction

During the 1920s, the mass production of automobiles triggered an upsurge in trauma and accidental injury in the United States (U.S.). At the same time, hospitals began to emerge as a notable part of the U.S. healthcare infrastructure, which was, and remains, a primarily private enterprise (Rosenberg 1995). The prominence of hospitals came, in part, from emergency-care services offered. In the era of expansion following the Second World War, the Hill-Burton Hospital Survey and Construction Act of 1946 enabled the creation and expansion of hospital emergency rooms (ERs) throughout the U.S. (Hoffman 2006). Much like other aspects of twentieth-century healthcare in the U.S., the prominence of ERs was bolstered by scientific discoveries and medical interventions that greatly improved healthcare providers' abilities to resuscitate the sick and wounded (Howell

1995; Rosenberg 1995). The prevalence and utilisation of ERs boomed in the 1950s and 1960s, and continued to climb steadily in the decades following (Hoffman 2006, 2012; Schuur and Venkatesh 2012; U.S. Census Bureau 2011). ER utilisation figures indicate that ERs are a principal gateway by which many patients gain access to U.S. healthcare, making them an important component of the healthcare experience for both physicians and patients.

And while emergency medicine (EM)[1] has garnered the attention of the popular media, prominent think tanks and policy-makers in the U.S. (see, for example, Morganti et al. 2013), it has attracted noticeably less directed study by medical anthropologists (for recent exceptions, see Hillman 2014; Mondragón et al. 2008; Person et al. 2013; Powell et al. 2014). In contrast, the physician–patient interaction has been extensively studied within medical anthropology, and much relevant literature focuses on patients' experiences and

the cultural modes of the expression of illness and its relationship to cultural constructs (Cassell 2002; Good 1994; Kleinman 1988; Nichter 1981). Much of this research has been conducted in outpatient clinics and inpatient wards, where the patient experience occurs within a relatively controlled, institutionalised setting, which in the case of the U.S. is shaped by a largely privatised healthcare system (Fox 1959; Hahn 1985; Rouse 2010). For example, in order to be evaluated and treated by an oncologist, a patient must have a diagnosis of cancer, a predetermined appointment and the means to pay for these medical services (either through private or public insurance or direct payment). Patients are often expected to return for multiple visits, in which they form relationships with their physicians and their progress can be monitored over time. In contrast to other healthcare settings, the ER is a public space – the only place in the U.S. healthcare system that can be accessed by patients without the threat of refusal of service.[2]

This is due, in large part, to historical, political and economic idiosyncrasies of U.S. healthcare that have been well detailed elsewhere (Hoffman 2003, 2012; Quadagno 2005; Starr 1982, 2011). However, a critical juncture that helped establish emergency care as a legal right within American healthcare came in 1986 with the passage of the Emergency Medical Treatment and Active Labor Act (EMTALA). In response to an epidemic of emergency care refusal (Ansell and Schiff 1987; Kellermann and Hackman 1988; Schlesinger et al. 1997), EMTALA required that any U.S. hospital receiving Medicare[3] funds (i.e. nearly all hospitals), 'must provide for an appropriate medical screening examination within the capability of the hospital's emergency department … to determine whether or not an emergency medical condition exists' (Department of Health and Human Services 2003).[4] EMTALA also stipulated that patients themselves could predetermine that their symptoms constitute a medical emergency prior to medical evaluation.

EMTALA came in the wake of two developments that increased reliance on U.S. ERs, cementing their role as the 'safety net' of American healthcare. First, the number of uninsured Americans rose dramatically in the 1980s with the erosion of employer-subsidised private insurance and simultaneous cuts in funding of Medicare and Medicaid, the U.S. government-subsidised insurance (Friedman 1991). Second, efforts to curb U.S. healthcare expenditure introduced 'managed care' organisations that made accessing healthcare more difficult and convoluted. In response to the inaccessibility of healthcare, millions of insured and uninsured Americans turned to ERs to meet their healthcare needs. Emergency departments across the Unites States became increasingly crowded with patients, and a setting initially intended to provide care to the injured and critically ill became a significant source of primary care for a broad set of the American population (Case et al. 2014; Morganti et al. 2013).

This is widely acknowledged to be less than ideal. Neither the physician nor the patient has the benefit of choice, familiarity or follow-up in the interaction. Rapport and trust between the patient and provider must be established within minutes, and clinical judgments, recommendations and decisions are made at the same pace. The fast-paced environment in combination with the ER's place as the frontline of U.S. healthcare creates a tension between 'emergent' and 'non-emergent' diagnoses,[5] which can be difficult to discern and contribute to greater medical uncertainty and heightened patient vulnerability in EM. And while uncertainty is pervasive in all aspects of medical practice, the degree of risk is significantly heightened within emergency medicine – one emergency physician this compared to 'playing chess with God' (Veysman 2010). Another emergency physician wrote of his experience in practice: 'I have an abiding fear that while I'm grinding through an ER full of non-emergencies, there's someone I've not gotten to whose coronary arteries are clotting shut, or whose inflamed appendix is about to burst' (Austin 2008). For this reason, the ER is an important setting from which to analyse how trust is constructed and risk and uncertainty are managed.

This article explores the uncertainty and risk that underlies the practice of emergency medicine, and the ways emergency physicians manage these in the context of patient care. It also examines how risk management is intricately linked with trust building and the demonstration of competence for emergency physicians. It concludes that the management of risk and the demonstration of competence are closely interdependent processes within this clinical setting.

Methods

Between May 2013 and August 2013, emergency physicians were invited to participate in this study using pre-existing electronic mailing lists. I conducted semi-structured interviews with thirteen respondents using a protocol approved by the institutional review board at Emory University. Participants' clinical experience ranged between four and twenty-four years in clinical practice. All participants provided verbal informed consent prior to the beginning of the interview. Most

interviews were audiotaped (n=11); however, participants also had the option to decline audiotaping if they preferred (n=2). Notes from taped interviews were transcribed verbatim. Responses were de-identified and transcribed immediately after interviews were conducted. I reviewed transcripts and emerging themes throughout the data-collection process.

The content for the interview guide was informed by literature in emergency medicine and medical anthropology. In the interviews, I enquired about physicians' perceptions of medical uncertainty, risk and their own competence. Interview questions included: what kinds of things come to mind when you think of 'risk' or uncertainty' in emergency medicine? What are the things that add uncertainty, doubt or risk to your ability to care for patients? When you are interacting with patients, what are the things you do to convey to the patient that you are competent? Participants shared personal experiences in clinical practice as well as feelings of satisfaction and dissatisfaction with the clinical encounter and the institutional structures and clinical spaces in which these encounters took place. Both data collection and analysis were informed by the last decade of my training and clinical practice in emergency medicine.

Uncertainty and Risk in Emergency Care

Uncertainty is inextricable from human existence – a fundamental recognition that we live in a world in which circumstances are bound to change, for better or for worse. Uncertainty is loosely used to represent the unknown, the unknowable, and the uncontrollable, making it a broad and unmanageable concept, which includes the possibility of positive outcomes or even catastrophic outcomes. In reflecting on uncertainty, many physicians I interviewed expressed how daunting they found it to be:

– The cases that probably scare me the most are the ones where I am totally certain I know what's wrong with you and I, for example, send you home. And you have a bad outcome and I didn't even realise that there was a risk in sending you home. And the problem is that I don't even know that they exist … And I think that's what makes emergency medicine – the part of it that keeps you up at night.

– There's always a disease process that may be too subtle for you to pick up or it just doesn't click in your mind or there may be things that people are withholding from you for different reasons.

– You know, all the codes and the trauma, those are all very exciting, but they don't require a lot of

thought. They're formulaic and we do certain things in a certain way. It's the ninety-year-old lady who comes in and has a cough and maybe a little fever, who could have just a cold or could be in the beginning of sepsis … Do you say that's nothing and let her go? Or do I do hundreds of thousands of tests on her to prove that she just has a cough?

– Did I really rule out *every* life threatening cause of abdominal pain or just the ones I know about?

These comments illustrate the utility of clarifying what is meant by 'uncertainty' and distinguishing it from ignorance, indeterminacy and risk (Wynne 1992).

According to Wynne, ignorance ('we don't know what we don't know') eludes recognition by its very nature (Wynne 1992: 114). In contrast, Wynne observed that the implicit assumptions in scientific modelling are not constant. Instead, they are subject to ever-changing real-world conditions that make indeterminacy an intrinsic part of scientific knowledge and understanding. Indeterminacy is therefore uncertainty, which is present when a system's parameters are known, whereas the probabilities of the outcomes are not.[6] Relatedly, one 'can talk authentically about risk when the system behaviour is basically well known, and the chances of different outcomes can be defined and quantified by structured analysis of mechanisms and probabilities' (Wynne 1992: 114). As a category, risk therefore serves to delimit the boundaries of uncertainty and to quantify, predict and control the potential for harm. However, in the medical and social sciences, risk is used polysemically to reflect specific characteristics of individuals, populations and social relations (Boholm 1998; Panter-Brick 2014; Rappaport 1996; Wilkinson 2001). In the interviews I conducted, emergency physicians variously employed these multiple characterisations of risk in their assessment and treatment of patients.

The delineation of risk, its control and its exclusion define the practice of EM. In the setting of time and resource constraints, EM nosology takes a narrow definition of 'emergency' – one that can be subtle and difficult to discern. To address these difficulties, 'emergency physicians frequently use an abbreviated form of the hypothetico-deductive model as a clinical decision-making strategy ... Assessment of acuity takes precedence over diagnostic closure' (Kovacs and Croskerry 1999). Whereas diagnosis and healing are the primary endpoints of other medical systems, the exclusion of diseases deemed 'emergent' is the measure of success in the ER. For instance, the evaluation of a patient with abdominal pain may focus on *excluding* a diagnosis of appendicitis rather than diagnosing the actual cause of the pain. Patients are therefore fre-

quently given a symptom-based diagnosis of unknown aetiology and then discharged with instructions to follow-up within another healthcare setting for further testing. Physicians interviewed in this study endorsed this practice model. One physician related in an interview,

> I tell [my patients] that 'The best news I can give you is if I don't know what's going on'. Because our workup is looking for the bad stuff and hopefully you won't have that. So, if there's something bad, then we'll find it and let you know hopefully.

All physicians in this study related having similar conversations with their patients. But most of them also perceived that the diagnostic goals of emergency medical practice fell short of their patients' expectations. In the course of an interview, one physician joked of this,

> I've never had someone say, 'Well it is impressive the number of possible diseases I might have had and I thank you for your ability to narrow it down to just a few or just to one'.

Physicians perceived that, in many clinical encounters, they were expected to give a definitive diagnosis and, in turn, a concrete treatment plan. Furthermore, they perceived that patients' expectations of medical science exceeded the realities of the technology available and the resources available within the ER. One physician summarised the difficulties of her clinical practice in this way:

> I think it's hard because a lot of people assume that there's a 'magic bullet' … I [the patient] have to find someone who knows what it is, or who can even put a name on what's wrong.

Patients' expectations are therefore perceived to be in conflict with the principles of clinical practice, in which diagnostic certainty is expressed in degrees of belief or probability (Goodman 1999). Popular representations and expectations of medical expertise (e.g. in the popular media, daytime television), in contrast, emphasise certainty and expertise as the most important features of modern medicine. The disjuncture between the limits of medical knowledge, the expert role and the realities of care delivery represents an example of what Kleinman described as an 'institutionalized conflict between lay and practitioner views on clinical reality and evaluations of therapeutic success' (Kleinman 1978: 85).

Indeed, institutional context is pivotal to how risks are perceived, framed and communicated. This is no less true in ERs, which are distinguished from other parts of the healthcare system by their relative ease of accessibility to the public. Physicians interviewed identified this and, in turn, a lack of pre-existing relationships and familiarity with patients as important contributors to uncertainty in emergency care.

> We make decisions about life-altering situations without the most basic historical facts. You know, someone comes in altered, found down. Where their primary care physician would know why that person went down, we may not get any historical facts at all. You don't know [their past medical history]. We work in a field where people can show up from any location, any nationality, any background. It provides a level of risk that arguably most people would consider terrifying.

> We have to make a lot of decisions with very little information. We don't have an established relationship with the person to fall back on, so that's an aspect of risk.

In these remarks, risk is used to indicate both the ignorance and indeterminacy that characterise all forms of medical practice, but are especially pronounced in EM. This is due to the ER's place as a public space in the U.S., in stark contrast to other parts of American healthcare. For physicians interviewed, this contributed to a prevalent feeling that 'anything can happen' and that catastrophe is always possible. The lack of patient familiarity undermined the utility of other resources within the hospital infrastructure (i.e. medical records, and alternate sources of information).[7] This further stripped the patient encounter of familiarity and compounds the risk associated with the diagnostic and treatment process.

In one striking example, one physician I interviewed recounted the story of a man he had cared for the week of our interview. The man had walked into the ER on a particularly busy evening and told the staff on duty that he was there to be evaluated for abdominal pain. His vital signs were recorded and he was registered per the usual administrative protocols. Hours later, the patient was found unresponsive in the waiting room, and was rushed back to the main ER area, resuscitated and eventually transferred to the intensive care unit (ICU). Diagnostic testing yielded neither an aetiology for his abdominal pain nor a clear indication as to why he had become unresponsive. In putting together the details of this man's case, it became clear that he had been listed under a different name and had not responded to the erroneous name when called from the waiting area. He had been lost and overlooked; after an extensive (and invasive) diagnostic process, even his name was unknown at the end of the interaction. At the time of our interview, the physician expressed both regret for the sequence of

events and resignation that a different version of these events is always possible.

This story highlights how structural features of emergency care produce certain types of risk. In the absence of familiarity and time, patients' voices can be noticeably absent, ignored or unheard, leaving them vulnerable to a range of interventions and uncertain judgements. Moreover, even when patients' voices are not absent or faint, there exists a tendency for assumptions, which augments patients' vulnerability and boosts the probability of negative outcomes.

Who's at Risk?

The notion of risk, and how it defines our existence within, and our interactions with, the world around us has received a great deal of scholarly attention within the social sciences (Beck 1992; Douglas 2003a, 2003b; Douglas and Wildavsky 1983; Lash et al. 1996; Power 1994; Rappaport 1996). Nevertheless, how to conceptualise and study risk remains a matter of contention. As a statistical concept, risk of harm is the potential for an adverse outcome following an exposure known or hypothesised to cause harm. Rational choice theory makes use of this framework to explain how individuals (cast as rational actors) assess and act to minimise risk and maximise utility as they navigate their world (Hechter and Kanazawa 1997). This paradigm, however, provides a limited understanding of risk and its place in the social world.

Although risk can be statistically quantified and modelled, it is a necessarily subjective, value-laden and politicised category. Interests vary between individuals and groups. What counts as risky, and how it should be managed, is constantly being contested and negotiated. To account for this, cultural theory takes risk from an individual perception to a group process and illuminates how perceptions of risk are culturally and situationally contingent. It helps frame risk as a politicised category and blame as a mechanism by which power is reinscribed and social structures reinforced (Douglas 2003b; Douglas and Wildavsky 1983; Fox 1980; Tansey and O'Riordan 1999). Thus, cultural theory illuminates why some issues are heavily disputed, whereas others are normalised. Risk is therefore not a static quantifiable property of situations or things, but a 'relational order' of meaning (Boholm 2003).

The multivalent nature of risk was a salient theme in the interviews I conducted with emergency physicians. For example, when asked to reflect on the manifestations of risk in EM, physicians replied:

I think of risk in terms of taking a gamble that someone is OK. Our drunk patients … So many people are like, 'Oh, just let them sleep it off'. But they don't understand that person is incredibly dangerous to you, because they can have absolutely nothing wrong and they could just be drunk or they could be harbouring a head bleed or in four hours they could be in severe DTs [Delirium Tremens, a severe form of alcohol withdrawal] and we just don't know. We cannot stop paying attention to them. That's kind of how I look at risk. Who stands to lose the most; either myself or the patient, in my interpretation of their state?

We make assumptions and we move forward that way; even abdominal pain. We over-work-up abdominal pain. A lot of people have a lot of somatisation of their emotional stress, you know, mental stress or just stress in general that causes abdominal pain; and we're just killing them with radiation.

These physicians' statements reveal three important aspects of their perception of risk. First, they highlight how physicians simultaneously evaluate risk at the level of individuals ('who stands to lose the most?') and groups ('we're killing *them* [patients] with radiation'). In determining what's at stake, physicians simultaneously view themselves as the ultimate bearers of responsibility and as potential targets of risk. They actively weigh the risk of disease, the risk of intervention, the risk of being singled out by colleagues for giving 'poor' or 'substandard' care, and the risk of malpractice litigation. In all of the interviews I conducted, physicians implied their interests to be intertwined and aligned with patients' interests. This is undoubtedly the case in the stories divulged and in most clinical interactions, yet it is important to note that interests can diverge between individuals and over time. Moreover, these statements implicitly acknowledge a power differential between patients and physicians, which I will discuss further in the next section.

Second, these comments reveal that risk has an important temporal component. The 'drunk patient', for example, can develop alcohol withdrawal (a potentially lethal condition) within 'four hours'. Colleagues and administrators can examine patients' charts at later dates. And although the clinical interaction in the ER is brief, adverse consequences can reveal themselves hours, weeks or years after the interaction. For instance, the risk of missing a serious cause of abdominal pain is weighed against an elevated lifetime risk of cancer due to radiological imaging (e.g., with a CT scan). The temporal aspect of risk was an important theme throughout the interviews, with physicians stating that they constantly weighed the short- and

long-term risks and effects of their assessments and decisions. Moreover, the temporality of risk and its dynamic nature brings up the possibility that patient and practitioner interests can diverge at a later date.

Third, these responses reveal how risk is simultaneously perceived to be a relational order ('who stands to lose the most?') and an inherent quality attributed to some bodies or individuals ('the drunk patient' or the patient with 'nonspecific symptoms'). The responses above show how patients are considered potentially unreliable sources of information. In one study, for example, the institutional setting of emergency medicine was observed to encourage strategic symptom reporting by patients (Hillman 2014). Beyond symptom reporting, patients' bodies and disease processes are also considered unpredictable ('We cannot stop paying attention to them'), and therefore are in need of supervision and intervention in order to minimise risk to patients and physicians alike. Finally, these responses demonstrate the inextricability of trust from risk perception. Indeed, trust is integral to the physician–patient relationship, but it can vary across time and between individuals and implicitly affects risk perception in the clinical encounter (Grimen 2009; Raffaetà 2012; Rappaport 1996).

Competence and Risk Management

The enculturation of medical students during their medical training explicitly focuses on cultivating 'competent' physicians rather than minimising medical uncertainty (Good 1995; Konner 1987; Sinclair 1997). Institutions that regulate residency training, oversee licensure and accreditation, and publish guidelines to standardise medical care further contribute to the development of specialised knowledge and the construction of competent physicians. These are important platforms through which physician competence is constructed and conveyed to patients and the broader public. At the surface, competence is often defined in terms of technical proficiency, clinical acumen or scientific knowledge – all of which serve to manage risk and to minimise patient harm inherent to the disease process.

However, beyond just highlighting medical expertise, competence is also used as a way to communicate the idea that the patient and practitioner's interests are aligned within the clinical encounter. That is, competence also includes helping patients believe that the decisions made by the physician represent the 'best possible care' available (Good 1995). In EM, where the physician–patient encounter is determined by chance and the diagnostic process is aimed at excluding medical emergencies rather than making definitive diagnoses, how does a physician demonstrate competence and engender trust? How does one remain a qualified 'expert' when the diagnosis is unclear and the interaction singular?

When posed these questions, emergency physicians in this study cite a reliance on medicine's 'symbolic reality' as a way to inspire confidence in their patients (Kleinman 1973). Most stated that their professional dress (i.e. the white coat or surgical scrubs) or specialised equipment (e.g. the stethoscope) helped distinguish them from other hospital staff and reinforce their position in the healthcare team (Blumhagen 1979; Rice 2010). Physicians also situated their expertise within evidence-based medicine and the science behind clinical practice. This included a great emphasis on diagnostic tests, which in the U.S. play an important role in minimising perception of medical risk for both patient and practitioner and establishing trust in this setting. Quantitative diagnostic tests (e.g. laboratory tests) bridge clinical practice and scientific knowledge. They help physicians exclude, measure or quantify disease. When a physician's opinion is in doubt, diagnostic tests appear to provide objectivity and hence legitimacy to the diagnosis or treatment plan for the patient. Yet these technologies are not passive tools in medical-care delivery; they have played an active role in mediating social relations in the healthcare setting (Saunders 2008). These diagnostic technologies remind us that medical care is not a fixed commodity but a set of heterogeneous practices that 'move between doctors, nurses, machines, drugs, needles and so on' (Mol 2008: 32). The responses elicited in this study further remind us that care, like risk, is a constantly negotiated process between patients and healthcare providers.

These diagnostic tests and results are, in part, used to construct a cohesive narrative, producing disease as an object to be examined and managed by both physician and patient. Yet, even when used as a proxy for truth and objectivity, they, like medical care itself, are fraught with uncertainty. As they travel between physicians and patients, diagnostic tests take on various meanings that sometimes undermine the certitude they come to represent (Livingstone 2010; Mol 2002). These technologies, for instance, can be used to bolster a physician's competence and credibility (as noted above), but can also paradoxically undermine expertise, which represents an alternate and occasionally conflicting understanding of truth (Sismondo 2011). This tension was a salient theme among the physicians in this study, who relied on technol-

ogy to demonstrate their competence but also felt that diagnostic tools also competed with their professional expertise.

In the interviews conducted, physicians reported confidence in their judgement and felt that, in most cases, history and physical examination alone were sufficient to make an accurate diagnosis and treat the patient. They did not, however, believe that their clinical judgement alone was enough to elicit patients' trust. They reported that quantitative diagnostic evidence was an important way to establish trust and to reinforce the validity of their judgement. They stated, for example,

> Now, physicians can't demand authority, they have to earn it. You have to prove why you're the expert. People can search things online. So, I do think that if you can objectify and quantify your thought process and back it up with labs, patients do appreciate that in this day and age.

> I think a lot of patients think in terms of studies perhaps, and it's almost never about the studies … It's more concrete for them, because I don't think they trust that if you listen to their lungs, and they're clear, that it's enough to say that they don't have a cancer. What are they really worried about? So, if you say 'Your chest x-ray looked clean and clear' they say, 'Oh!' Because that's hard evidence – as opposed to just your clinical opinion.

A number of physicians interviewed also reported that they used diagnostic testing to supplement the brevity of clinical interactions. They reported that they resort to diagnostic testing more frequently under time constraints and that diagnostic testing allowed them to communicate that they had taken patients' concerns seriously even if their interaction had been unusually brief.

These comments reveal the interconnectedness of trust, risk and competence in clinical practice. While risk management is inevitably part of the diagnostic exclusionary process in EM, the interviews in this study reveal that risk minimisation is also used to elicit trust and to display competence to patients. The relationship between risk and competence has been described in other settings. For example, Good (1995) elucidates how oncologists communicate statistical uncertainty to patients, in the process constructing clinical narratives, forging partnerships and delineating long-term clinical care plans for their patients. This is process is inherently reliant on an asymmetry of knowledge and power between patients and physicians, but it is also the vehicle by which competence is displayed and long-term relationships are solidified in the treatment process.

Similarly, emergency physicians identified the end of the clinical encounter as an opportunity to review findings, interpret results and to share the grounds for their decision-making – to construct a narrative of the encounter and its implications. Although these physicians' narrative strategies and the desire to connect physician and patient were similar to Good's study of oncologists, the goal in EM is reversed. While in other treatment settings (e.g. an oncology clinic), the goal is for the patient to return over the course of treatment, the narrative in this case is meant to close the relationship with the emergency physician and to reassure the patient that risk has been minimised and that ER care is no longer necessary, or by admission of the patient to hospital care. One physician described it in this way:

> I've had patients question my authority, but in that case, I think that your biggest ally is information and education. You have to educate the patient as to why you did what you did. I leverage my labs. I actually sit down with the patient, and I say, 'Look, you're having a simple gastroenteritis. It's run of the mill, you're not that sick, and here's why: your x-ray is normal, there's no evidence of [bowel] obstruction'. Whatever it is – sodium, potassium – I name the labs now. I tell them, to show them that I've thought about it. Because we tell them about *labs*, but what does a lab mean? So, I tell them that we've done an extensive work-up. I've got a white count, your haemoglobin, your kidney function, sodium, potassium, liver function tests. All of that looks good. I think there's a disconnect between what we know and what we do for patients, and what the patient realises has been done for them. And we have to narrow that disconnect.

Within this interaction, this physician, first, uses the labs to back up his clinical judgement. Second, he explicitly lists the laboratory findings and their role in his decision-making process as a way to reaffirm his competence while simultaneously relating that any risk to the patient has been considered and excluded or minimised. Finally, he uses these findings to construct a coherent, retrospective narrative of the interaction ('You're not that sick, and here's why'). Thus, 'narrowing that disconnect' and disclosing information is used to discontinue the interaction between the ER and the patient.

Conclusion

First, this article reviewed the social and historical factors that have uniquely shaped the practice of emergency medicine in the U.S., and made ERs the 'safety

net' of American healthcare. Today, ERs in the U.S. provide care for millions of patients annually and are equipped to face a range of medical and traumatic processes. There remains, however, a disarticulation between the purpose ERs are intended to serve and the purpose they actually serve for patients and physicians in the U.S. This is, in large part, a product of the historical idiosyncrasies of American healthcare and results in a chasm between practitioners' clinical goals and patients' perceived expectations of medical care. Second, this study shows the multiple ways that risk is perceived, managed and negotiated in the practice of EM. It further demonstrates how risk perceptions and institutional constraints shape the physician–patient interaction. Third, this study demonstrates how the management of medical risk is important to the establishment of trust and the demonstration of physician competence in EM. The physicians in this study perceived that their competence was augmented by the transference of knowledge to their patients at the end of the clinical encounter, especially when legitimised by laboratory data. In sum, this article demonstrates how the institutional setting of emergency medicine shapes the multiple and interdependent ways that risk is perceived and managed by emergency physicians.

Importantly, the same conditions that demand the overlap between the management of medical risk and the construction of competence also privilege diagnostic measurement and medical knowledge over patients' knowledge and subjective experiences. With the exception of the patient's history, for example, all of the aforementioned tools for demonstrating competence are unidirectional. That is, they are transmitted from physician to patient rather than the other way around. This pattern of information exchange relies upon (indeed, requires) extensive assumptions about patients' reasons for seeking care in the ER and for their needs, expectations and desires in interacting with physicians. While it is beyond the scope of this research to discuss disjuncture between patients' and practitioners' perspectives, this would augment the findings in this study and represents an important opportunity for future research.

Acknowledgements

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Notes

1. Within this article, the term 'medicine' refers to what has elsewhere been called 'biomedicine', that is 'the predominant medical theory and practice of Euro-American societies, a medicine widely disseminated throughout the world' (Hahn and Kleinman 1983: 305).
2. Access to emergency rooms may, of course, be limited by lack of transportation and availability of nearby hospitals. Moreover, not all hospitals and emergency rooms offer all medical services. Nevertheless, ERs remain the most readily accessible providers of healthcare in the U.S.
3. Medicare (www.medicare.gov) is a national social insurance programme which provides health insurance coverage for Americans 65 years and older as well as younger people with disabilities, end-stage renal disease (ESRD) and amyotrophic lateral sclerosis (ALS).
4. For details of EMTALA, see: https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/index.html?redirect=/EMTALA/
5. The distinction between 'emergent' and 'non-emergent' refers to conditions that require an ER evaluation (i.e. 'emergent' conditions such as a stroke) from those that can be better treated in an outpatient setting (i.e. 'non-emergent' conditions such as a cough). While these categories are of great interest to physicians and policy-makers, the distinction between them is often nebulous (see, for example, Raven et al. 2013).
6. In medical practice, this can be understood in terms of the body (the system) and its organs (the system parameters). The wide range of parameters that comprise the body's functioning are relatively well known; however, the clinical outcomes cannot be predicted precisely because of the complexity of feedback mechanisms and the unique characteristics of the individual body.
7. This is, in large part, due to the largely private nature of U.S. healthcare, where health records are owned and maintained by individual healthcare entities rather than integrated across the healthcare system.

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