Telling a Story of Safety

Media and Organizational Discourse on Patient Safety

A FrameWorks Research Report

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Table of Contents

Introduction **3**
Methods and Data **4**
Analysis **5**
Findings from the Frequency Analysis **6**
Communications implications of the frequency analysis 11
Findings from the Latent Class Analysis **12**
Communications implications of the latent class analysis 19
Recommendations **20**
Conclusion **22**
About the FrameWorks Institute **23**

Introduction

Over the past decades, patient safety and medical error reduction efforts—spearheaded by researchers, advocates, policy experts, and health care professionals themselves—have undoubtedly improved health outcomes in the United States. However, more work remains to improve patient safety. This work will require both small and more substantial changes in the health care system, including improving information sharing, establishing cultures of safety in health care settings, and shifting funding to incentivize patient safety, among many more initiatives. While it remains crucial for health care professionals to be fully aligned in their commitment to improving patient safety, recent popular debate on the future of the US health care system makes it abundantly clear that members of the public also need to be engaged as knowledgeable participants in discussions about patient safety. Right now, however, public discourse on patient safety and health care quality does not support this goal. Even though patient safety issues touch the lives of everyone who participates in the US health care system, the public rarely encounters ways of engaging with complex questions, such as what patient safety is, why the current system of care can compromise it, and how it can be improved.

Media coverage, in particular, plays an important role in determining how the public understands and responds to calls to improve patient safety. This is because media stories, public thinking, and policy are interdependent. The media act as information gatekeepers that variously amplify or mute messages about issues like patient safety and can often render an issue invisible to the public. Media shape people's beliefs and attitudes by repeating certain stories and frames and excluding others, a phenomenon researchers call the "drip, drip" effect.[1] Over time, this steady drip shapes public thinking and action. The media, however, are not the public's sole source of information about public safety issues. Advocacy, policy, and research organizations regularly communicate with members of the public about patient safety issues. While their platforms may not be as powerful or popular as the media, they nevertheless frame information for the public about what patient safety is, how it can be improved, and the frequency and effects of adverse medical events.

The FrameWorks Institute staff designed this report to provide patient safety experts and advocates with a detailed understanding of the existing communications environment. This report identifies and compares dominant narratives related to patient safety issues in the media and in advocacy, policy, and research organizations. It also analyzes how media and organizations' communications practices affect public thinking. Media coverage can be harmful and misleading or informative and productive. Organizations can affect the character of that coverage, but not without a deep understanding of the typical structure of media stories about the issue.

FrameWorks conducted this research in collaboration with the Betsy Lehman Center for Patient Safety as part of a larger, multi-method project designed to uncover how experts, members of the public, and health care professionals understand issues relating to patient safety and health care quality. This report draws on that research to describe how media and organizations shape public understanding of this issue.

It also makes initial recommendations that experts and advocates can use to more effectively communicate the importance of patient safety.

The report begins with a review of the methods used to construct the samples of media and organizational materials, code the materials, and analyze the results. It then reviews the key findings from the analysis and their implications for communicating about patient safety. The report concludes with a set of recommendations that researchers, practitioners, and advocates can use to begin shifting communications practices about patient safety.

Methods and Data

We designed this research to answer four questions:

1. What stories and framing strategies are advocacy, policy, and research organizations currently telling to communicate about patient safety?
2. How are the media currently framing patient safety?
3. What are the similarities and differences between the stories that the media and organizations are telling?
4. How can patient safety advocates shift media narratives to expand public understanding and build support for policies and programs designed to improve patient safety?

The media sample includes articles taken from national newspapers and national television broadcasts. The sources include the *Arizona Republic*, the *Cincinnati Enquirer*, CNN, the *Columbus Dispatch*, the *Dallas Morning News*, the *Denver Post*, the *Detroit Free Press*, Fox News, the *Los Angeles Times*, the *Mercury News* (San Jose), MSNBC, the *New York Post*, the *New York Times*, the *Star Tribune* (Minneapolis), the *Tampa Tribune*, the *Washington Post*, the *Boston Globe*, and the *Boston Herald*. We selected sources based on their circulation, as well as geographic and ideological diversity (as measured by their endorsements in the 2008 and 2012 presidential elections). In addition, we chose sources to make sure Massachusetts media were robustly represented.

Using LexisNexis, FrameWorks' staff searched and downloaded articles from these sources using a search strategy designed to capture a broad range of topics that concern patient safety.[2] The searches were limited to pieces that appeared between January 1, 2015, and December 31, 2016. We removed media pieces that did not deal substantively with patient safety and duplicate articles (the same article published in multiple news outlets) from the sample. This process resulted in a final sample of 236 stories, each of which we coded and analyzed.

FrameWorks' staff also gathered materials from organizations that communicate in some fashion with members of the public about patient safety.[3] In collaboration with staff at the Betsy Lehman Center,

FrameWorks' staff created a list of advocacy, policy, and research organizations working to address patient safety to include in the analysis. We then sampled public-facing communication materials from each of these organizations.[4] These materials included press releases, reports, "About Us" web pages, and other communications. We selected these materials because they contain content about how each organization describes its mission and the specific approaches to patient safety that it promotes. In total, the sample consisted of 195 materials drawn from 27 organizations.

Analysis

We coded each media and advocacy document to identify the presence or absence of each of the narrative components shown in Table 1.

Table 1: Examples of Codes

Narrative Component	Brief Description	Examples of Codes[5]
Topic	What is the overarching issue type discussed?	• Error of commission • Error of omission • Near miss • Setting (e.g., inpatient, outpatient)
Causal factors	Why do adverse events happen? What types of causes are mentioned?	• Systems-level causes (e.g., inadequate information, protocols, culture) • Individual-level causes (e.g., bad doctor, patient noncompliance)
Consequences	What are the effects of adverse events?	• Individual-level patient • Individual-level health care professional • Societal (e.g., costs)
Messengers	Who are the people and/or organizations quoted in the article?	• Politicians, government officials • Members of the public • Spokespeople of specific organizations
Solutions and policies	What is being—or should be—done to improve patient safety?	• Empower patients • Punishment • Reform the legal system
Responsibility	Who is responsible for improving patient safety?	• Government • Health care professionals • Patients

In the last stage of the analysis, we used a statistical method called latent class analysis (LCA) to identify mutually exclusive subgroups (or *classes*) within a population. LCA is commonly used to discover whether a sample of cases (in this case, media or organizational articles) can be divided into a smaller number of distinct groups based on multivariate categorical data (in this case, the presence or absence of our codes). Here, the term *class* refers to a specific kind of narrative being told about patient safety.

In our analysis, we first examined the frequency of each code in the media and organizational materials. We either omitted codes with less than 10 percent prevalence from the analysis or collapsed them with other thematically related codes to improve the stability of the model. We conducted the LCA separately for media and organizational materials, allowing us to identify the different types of narratives present within each.

We then interpreted the results of both the frequency analysis and the LCA in the context of the results from the cultural models research conducted on how members of the public and health care professionals think about patient safety, refining the key implications of the analysis of the media landscape.

Below, we first detail the key findings from the frequency analysis or mentions of narrative components in the sample. We then turn to the results from the LCA, which focuses on how the components are organized into narratives.[6]

Findings from the Frequency Analysis

The first set of findings come from the frequency analysis of organizational and media materials. This analysis reveals the absence or presence of individual codes in a single document. This type of analysis answers the questions *what is being said* and *what is absent* in the media and organizational discourse about patient safety. It is important to note that each document could include multiple mentions of each of the codes. Therefore, the percentages listed in the tables below do not add up to 100 percent.

Media materials rarely mention the phrase "patient safety." Our analysis shows that 39 percent of the media materials used the phrase "patient safety." Furthermore, a subset of these mentions (28 percent) were loosely related to the topic of patient safety and were categorized as *passive mentions*, where the phrase was not defined, explained, or incorporated into the body of the text (e.g., the phrase was used only in a photo caption or as part of the name of an organization). Organizational materials contained more frequent and robust mentions of patient safety, with 67 percent of materials using the phrase "patient safety." Of that percentage, only 14 percent were passive mentions.

The causes of adverse medical events are often missing from media and organizational materials. Approximately 30 percent of media materials and 38 percent of organizational materials failed to mention any cause of an adverse event or other patient safety issue (see Table 2), suggesting that both types of materials often miss the opportunity to fill in this vital piece of information.

When media and organizations mention causes, they focus on systemic causes. When organizational materials mention causes, they mention systems-level causes (e.g., nonexistent or lapsed protocols) more often than individual actions (e.g., the actions of specific health care professionals). Organizations mentioned systemic causes in 57 percent of their materials, while media mentioned those causes in 52 percent of their materials (see Table 2). This a potentially productive aspect of extant public conversations about patient safety.

When the materials focused on individuals who cause adverse medical events or other types of patient safety issues, the media were more likely to blame doctors and other health care professionals (37 percent of articles in the media versus 12 percent of organizational materials). Patients are identified less frequently than any other actor in both organizational and media materials. Only 4 percent of media materials and 12 percent of organizations mention patients as contributors to adverse events.

Table 2: Frequencies of causes mentioned in media and organizational materials

Cause	Percent of Media Materials	Percent of Organizational Materials
No cause mentioned	30%	38%
Systems-level causes	57%	52%
Health care professionals (often doctors)	37%	12%
Patients	4%	12%

Patients are the primary party affected by adverse events in media and organizational materials. Both media and organizational materials mention the consequences of adverse medical events for patients most often—79 and 64 percent, respectively. They mention other types of consequences much less frequently, as described in Table 3. In general, media and organizations primarily focus on the impacts of adverse effects on individual patients, which can obscure the broader consequences of patient safety issues.

Table 3: Frequencies of consequences mentioned in media and organizational materials

Consequence	Percent of Media Materials	Percent of Organizational Materials
Patient	79%	64%
Health care professionals	20%	8%
Society (i.e., collective)	11%	12%

When media and organizational materials focused on the consequences of patient safety issues for health care professionals, they concentrated most often on the effects of whatever punitive measure was take to address the issue (lawsuits, etc.), rather than the important consequences felt by health care professionals themselves (e.g., trauma). Finally, media and organizational materials rarely mentioned the societal consequences of patient safety issues, constituting mentions in 11 and 12 percent of the materials respectively.

Media use diverse messengers; organizations do not use messengers. Messengers—the people or organizations communicating about an issue or relaying information or evidence—are important elements of a narrative because they help contextualize the message. They become a physical symbol of the issue by answering the question, who says this is a problem and that I should pay attention to it? Like any other frame element, messengers shape how members of the public interpret messages. For example, the public will consider some messengers as knowledgeable and trustworthy about a particular issue, and they will dismiss others as biased and self-interested. These assessments will affect how they understand information and what they will do with that information.

In more than 80 percent of media materials, specific, named messengers or sources communicate information about patient safety. Patients and their families voice information about patient safety in 14 percent of media materials, while 57 percent of media materials quote or paraphrase hospital administrators and doctors. Interestingly, 48 percent of the media sample mentioned politicians and lawyers, likely due to legislation on malpractice caps under debate during the time frame studied (see Table 4).

In contrast to the media, organizational materials often left information about safety unattributed. Sixty-six percent of organizational materials did not mention or highlight specific messengers. As with media materials, when organizational materials did provide information voiced by a messenger, it was most often a doctor.

Table 4: Frequencies of messengers in media and organizational materials

Messenger	Percent of Media Materials	Percent of Organizational Materials
No messenger	17%	66%
Health professionals	57%	24%
Politicians	28%	2%
Lawyer	20%	1%
Public (e.g., patients)	14%	6%

Both no one and everyone are responsible for patient safety in media and organizational materials. Forty-three percent of media materials fail to attribute responsibility to anyone, or they leave the information about who is responsible to address patient safety unclear. Of the organizational materials, 25 percent left responsibility unattributed.

When they explicitly named who or what was responsible for improving patient safety, both media and organizations pointed to a diverse range of responsible actors. Thirty-five percent of media materials and 45 percent of organizational materials mentioned health care institutions, such as hospitals and other facilities, as responsible actors. Media named specific actors, such as doctors or nurses, in 17 percent of the materials, whereas 40 percent of the organizational materials directly named health care professionals. Seventeen percent of media materials and 15 percent of organizational materials attributed responsibility for improving patient safety to government. Eight percent of media materials and 27 percent of organizational materials attributed responsibility to patients (see Table 5).

Table 5: Frequencies of responsible actors mentioned in media and organizational materials

Responsibility	Percent of Media Materials	Percent of Organizational Materials
No responsibility mentioned	43%	25%
Government	17%	15%
Members of the public	2%	3%
Hospitals or other health care facilities	35%	45%
Health care professionals	17%	40%

Patients	8%	27%

Materials consistently mention systems-level solutions. Organizational materials consistently mentioned systemic solutions, including the need to improve communications to ensure necessary information was available at the right time, improve transparency, and reflect shifting cultural norms in the field of health care. Interestingly, more than a third of organizational materials pointed to the need to empower patients as a potential solution for adverse medical events. The media also mentioned systems-level solutions, but at lower rates than organizational materials, with the exception of calls for reforming the legal system and expanding regulation. Furthermore, even though the media materials mentioned many systems-level solutions, no single solution was mentioned in more than a quarter of the media materials (see Table 6).

Table 6: Frequencies of solutions mentioned in media and organizational materials

Solution	Percent of Media Materials	Percent of Organizational Materials
Improve communication	24%	57%
Empower patients	12%	35%
Change the culture of health care	20%	31%
Improve transparency	24%	24%
Increase funding	7%	7%
Reform the legal system	11%	5%
Expand regulation	20%	14%
Encourage research	13%	30%
Punish offenders	10%	0%
Improve medical training	2%	4%
Offer professional development	9%	21%

Another interesting finding is that while organizations consistently refute the idea that punitive measures will effectively improve patient safety, 10 percent of the media materials identified punishment of health care providers as an effective means to address and potentially prevent medical errors.

Communications implications of the frequency analysis

Media discourse rarely mentions or explains the phrase "patient safety," making it more difficult for the public to think and talk about it. Media materials rarely use the phrase "patient safety;" when they do, they often do not explain what it means. In both media and organizational discourse, the phrase "patient safety" competes with other terms or phrases that are used to define the topic. This terminology problem potentially undercuts efforts to raise the salience of patient safety among members of the public. The inconsistent use of the phrase makes it more difficult for people to think about patient safety as an important issue to support. This lack of a consistent term or phrase also makes it challenging to find more information about the topic. For example, if people do not know that patient safety is an issue, how can they Google it?

Frequent mentions of systems-level causes and solutions can help people understand patient safety in a broader context. The high frequency of mentions of systemic causes of and solutions to adverse medical events in both organizational and media materials is a potentially productive aspect of extant public discourse about this issue. Members of the public can hear about how existing systems make adverse medical events more likely to occur. They can also learn about different proposals to shift systems to improve public safety. However, as we discuss in greater detail below, simply mentioning systems-level causes or solutions may not be sufficient to overcome unproductive thinking about patient safety among members of the public.

Attributing responsibility for adverse events to health care institutions or professionals may reinforce unproductive public thinking about doctors. A substantial amount of media and organizational materials name health care professionals, hospitals, and other health care facilities as responsible for preventing and addressing patient safety issues. Both media and organizational materials consistently identified health care professionals as causing adverse events without discussing the systems in which health care professionals work. If not carefully framed with clear explanations of when, why, and how health care professionals and institutions should be held responsible, this coverage may substantiate existing public thinking about the role of doctors in patient safety issues. FrameWorks research suggests that when thinking about adverse medical events, people tend to reason that if a patient finds a caring doctor, that doctor will provide safe care. Conversely, adverse events happen because health care professionals simply do not care about their patients enough. In other words, all responsibility for safety resides with the health care professional.[7] With the existing state of media and organizational discourse, people will continue to struggle to connect context to health outcomes.

Narrowly focusing on patient outcomes individualizes the issue of patient safety. People can easily understand why adverse medical events have consequences for people who are immediately affected. However, they are not typically told why or how the health care system, the actors within it, or society as a whole stand to gain or lose when patient safety is compromised. In other words, why does anyone other than an individual patient in a particular situation have a stake in patient safety? Media and advocacy materials do not answer this question. As a result, people struggle to understand the societal consequences

of failing to ensure patient safety. This narrow lens can depress the public's sense of efficacy and encourage apathy about what they can or should do to improve patient safety.

Leaving messengers unspecified potentially misses an opportunity to frame information. Attributing information to particular sources can serve to enhance or limit the reception and acceptance of that information among the public. When a messenger whom the public views as authoritative and trustworthy delivers a message, people are more receptive to that message. Conversely, when a messenger whom the public views as potentially self-interested or biased delivers a message, the message loses credibility and becomes easier for people to dismiss.

Supporting punishment as a solution to safety issues results in unproductive thinking about improving patient safety. Experts and advocates uniformly reject the idea that increased punitive strategies are an effective way to reduce patient harm or shape health care professionals' behavior.[8] The fact that media materials talk about punishment of health care professionals as a measure to support or oppose leaves this aspect of the story inconsistent in the media. In the absence of a consistent message about punishment, the public will likely default to its patterns of thinking about the importance of punishment as a management strategy and the only way to promote safety.

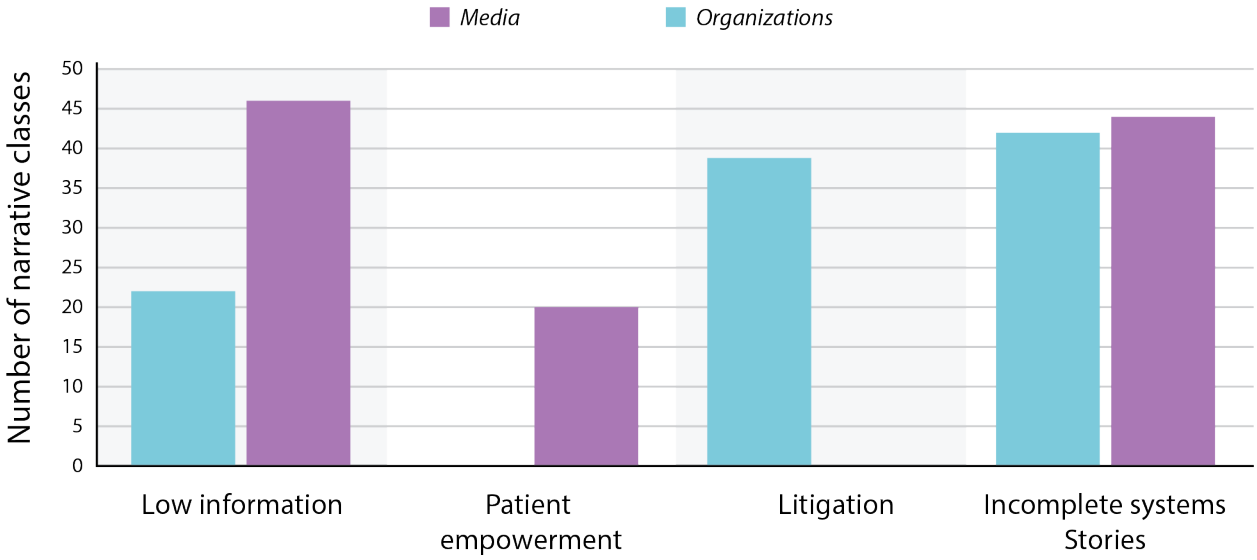
These results suggest why the public does not see a clear role for anyone other than doctors and health care facility administrators in helping to improve patient safety. In short, the story of improving patient safety that the public receives is one in which the field of health care serves as the main, if not sole, protagonist. Again, this story likely makes it more difficult for the public to think that a team of actors throughout our society—rather than just those working in health care—is needed to help improve patient safety.

Findings from the Latent Class Analysis

The second part of this analysis identifies a set of classes of materials that appear in public discourse about patient safety. Figure 1 presents a summary of each class identified in the media and organizational data.

Figure 1

Narrative Classes in Media and Organizations' Materials



Whereas frequency analysis measures the presence or absence of a single code, LCA measures the likelihood that codes will co-occur in a single document. For example, LCA allows researchers to answer questions such as, which types of causes tend to appear with which types of solutions in a single communication? Do codes that address the issue of patient activation, for example, tend to occur in a single communication? In this way, LCA identifies the kinds of *narratives* that are present in the media and organizational materials.

Narratives are framing strategies in that they help people organize, remember, and repeat information. In keeping with the scholarly literature on narrative and framing, FrameWorks defines a complete narrative as one that describes a problem or issue, states why this issue is a matter of concern, explains who or what causes the problem, provides a clear vision of a change or improvement in outcome, and delineates concrete actions that can be taken to create change in relation to the problem. LCA identifies the types of narratives (or lack thereof) that are present in the data. Instead of focusing on what is mentioned in the materials, LCA focuses on how multiple mentions are co-occurring in the materials. Below we describe the major findings from this part of the analysis.

Both media and organizational materials tell incomplete stories about patient safety. Along with inconsistent use of the phrase "patient safety" across these materials, a common problem was a failure to provide a coherent narrative about patient safety. These incomplete stories lack the narrative components that prior FrameWorks research has shown to be critical for improving public understanding.

A sizable proportion of materials in both the media and organizational samples belonged to a class of materials called *incomplete stories*. That is, 36 percent of media materials and 46 percent of the stories were missing one or more key narrative components. Materials falling into this incomplete stories class

failed to answer basic questions about patient safety and adverse events, including the following: Why do adverse events happen? What are the consequences? What are the solutions, and who is responsible for implementing them?

Organizational materials in the incomplete stories class primarily consisted of brief, informational overviews of medical error and patient safety issues directed at a public audience. While some communications maintained a broad focus (e.g., rates of medical error throughout the United States), others highlighted specific areas of concern (e.g., medication safety). These materials frequently outlined an organization's broad goals and occasionally provided basic statistical information about the incidence and prevalence of adverse events, similar to the following excerpt:

> Medical errors and unsafe care harm and kill tens of thousands of Americans each year. The facts are alarming: approximately two million healthcare-associated infections occur annually in the United States, accounting for an estimated 90,000 deaths and more than $4.5 billion in hospital healthcare costs. Unplanned, often preventable, hospital admissions and readmissions cost Medicare and the private sector billions of dollars each year and take a significant toll on patients and families, who suffer from prolonged illness or pain, emotional distress, and loss of productivity. As a result, the National Quality Strategy has made making care safer a national priority, focusing on three goals: (1) Reduce preventable hospital admissions and readmissions. (2) Reduce the incidence of adverse healthcare-associated conditions. (3) Reduce harm from inappropriate or unnecessary care.[9]

In the excerpt above, the author lists several consequences and solutions but provides no information about why the medical errors are occurring. Other organizational materials that were a part of this class followed a similar pattern, listing one aspect of the narrative to the exclusion of other parts of the story.

Media materials that fell into this class often listed a variety of issues related (sometimes loosely) to the topic of patient safety. Many included assessment outcomes (e.g., health care report cards) and coverage of voter initiatives concerning malpractice regulations. Several articles were largely unrelated to adverse events or patient safety but used the concept as an example or introduction to another topic:

> Texas emergency medical services earned a D grade, falling in the past five years from 29th to 38th place nationwide, according to a report by the American College of Emergency Physicians. Texas failed in providing access to emergency care, quality and patient safety and public health and injury prevention based on 136 measures, according to the report card issued Thursday. And things will become worse in Texas and nationwide as more Americans become insured under the Affordable Care Act, yet have little access to preventive care because there aren't enough doctors to meet the demand, said Dr. Alex Rosenau, president of the American College for Emergency Physicians.[10]

In this example and others like it, improving patient safety becomes part of a list of other problems affecting the health care system. In these kinds of articles, the public learns that patient safety is a problem but does not have access to other information about how it works, why adverse events happen, or what can be done to improve patient safety. In short, the media and organizations are communicating in lists that zoom in on one aspect of patient safety without telling a complete story.

Media stories tend to react to adverse events. One class of media materials, comprising 21 percent of the sample, described patient safety as a matter that is best addressed through litigation. Materials within this class were likely to cover egregious cases of medical malpractice and describe in detail the resulting lawsuits. Where solutions were mentioned, they focused on changes to the legal system, such as holding doctors accountable for errors or increasing payouts in malpractice suits. See, for example, the excerpts below:

> Gov. Cuomo threw his support Sunday behind "Lavern's Law," a bill that would strengthen the rights of victims of medical malpractice to hold hospitals and doctors accountable in court. The endorsement from the governor provides a big boost for the legislation named after Wilkinson, a Brooklyn mother who died in March 2013 from a curable form of lung cancer after doctors at Kings County Hospital failed to alert her to a suspicious mass noted in X-rays three years prior. Wilkinson, 41, was barred from suing the hospital due to a legal loophole that requires claims of medical malpractice against public hospitals be filed within 15 months after they occur instead of when the patient actually discovers the neglect. The push to reform the law is gaining steam in Albany as the legislative session enters its final stretch.[11]
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> A south suburban woman whose son was born with cerebral palsy joined her lawyer Thursday in blasting the University of Chicago Medical Center's handling of the case a day after winning a $53 million medical malpractice verdict. Attorney Geoffrey Fieger said medical staff at the hospital didn't recognize signs that Lisa Ewing's baby was slowly being deprived of oxygen during the 12 hours she waited to see a doctor. By the time they performed a C-section, it was too late. The medical residents "were either busy, asleep or just totally unable to handle anything that resembled an emergency," Fieger said at a news conference Thursday at the Peninsula Hotel. "I thought that they knew what they were doing," Ewing said Thursday while her son, Isaiah, who was born in 2004, sat in a wheelchair beside her. "I was very surprised in trial how they just had no remorse for anything, and the different lies they were telling," said Ewing, who lives in Hickory Hills.[12]

Organizational materials emphasize patient activation in making health care safer. Approximately 20 percent of the organizational materials describing patient safety emphasized a narrative about patient activation, where patients' lack of agency in the delivery of health care was identified as the primary cause of adverse events and several strategies to increase patient empowerment were offered as effective strategies to prevent medical error. Materials in this class were likely to assert the role of patients and families in preventing adverse events, including encouraging them to speak up when something goes

wrong and empowering them to have an active role in making treatment decisions. Many of these materials were careful to emphasize the role of the health care system in empowering patients:

> In outpatient settings, care coordination becomes even more challenging than it is in the confines of a hospital. Patients have to communicate to multiple clinicians, clinicians have to communicate with each other, electronic systems may or may not communicate across platforms. Patients are being asked to be more engaged in their care, but that doesn't mean they should have to carry the entire burden. An individual who doesn't feel well, who is anxious to know why, and who has sat in multiple waiting rooms for tests and exams, needs caregivers and health care systems to maintain vigilance throughout an accurate diagnosis and the initiation of a care plan. Physicians—and the other clinicians who see the patient during his or her diagnostic journey—are less vulnerable to errors when they are clear about which individual provider is coordinating the patient's course. Patients are less vulnerable when the coordinating provider clearly communicates test results, follow-up steps, and (if appropriate) a treatment plan.[13]

However, a second type of organizational material class focused only on the role of patients themselves and their individual responsibilities, often addressing patients directly. For example:

> *The single most important way you can stay healthy is to be an active member of your own health care team. One way to get high-quality health care is to find and use information and take an active role in all of the decisions made about your care… One study found that anywhere from 10 percent to 30 percent of Pap smear test results that were called "normal" were not. Errors such as this can lead to a wrong or delayed diagnosis. You want your tests to be done the right way, and you want accurate results. What can you do?*[14]

To clearly see the differences between stories that frame patient empowerment as a systemic or individual responsibility, consider these alternative approaches to discussing the topic of second opinions:

> While I recognize that most physicians are very supportive of their patients seeking second opinions, there still may be intangible, and often emotional, reasons why patients are reluctant to ask for one. My hope is that health care providers will take the time to talk with their patients and listen to their concerns, particularly if there is reticence or discomfort in pursuing the proposed plan of treatment.[15]
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> No surgery is risk free. It is important to learn about the possible benefits and risks involved in the surgical procedure you are about to have. Research has shown that patients who are informed about their procedure can better work with their doctors to make the right decisions. Getting a second opinion is important. Your doctor, surgeon, health plan, or local medical society can help you find someone who can give you a second opinion. Before seeking a second opinion, make

> sure your health plan will cover this expense. Before having surgery, ask your physician these questions…[16]

The first example situates patients within the health care system more broadly and explains the need for patients to be *empowered* to seek a second opinion. In this example, it is clear that patients have a role to play in assuring a correct diagnosis. They are the ones who do or do not "wonder if they should seek a second opinion." However, health care providers are also responsible, and must "take the time to talk with their patients and listen to their concerns."

In contrast, and as exemplified by the second passage, organizational materials that focused on the responsibility of patients to ensure the quality of their own care were more likely to emphasize the importance of an individual patient asking for a second opinion and obfuscate the role of the health care system in that decision. The example included above focuses entirely on the responsibility of patients to ensure the quality of their own care. The patients are responsible for "learn[ing] about the possible benefits and risks" of a procedure, told that it is important to get a second opinion, and told which questions they should ask their physician. While it mentions that other important players (doctors, surgeons, etc.) are available to help, it is clear that the responsibility to *ask for help* lies with the patient.

In some, organizations take the topic of patient activation seriously. An identifiable class of media materials explain the role of patient activation in causing and addressing patient safety issues. Within this class, however, articles diverged on whether the story is about patients needing to be empowered or patients needing to empower themselves. This is a subtle difference, but it will affect how the public understands the role of patient activation in improving patient safety.

Media and organizations regularly tell systems-level stories, but they lack explanations.
Our analysis revealed one cluster of media articles and organizational materials told a more promising story about patient safety. This class, comprising 43 percent of the media sample and 33 percent of the organizational sample, was more closely aligned with expert perspectives on improving patient safety. Qualitative analysis of this class, however, revealed two distinct types of articles. One type did indeed tell robust, systems-level narratives about patient safety, explaining solutions to improve quality of care:

> One thing that the [Institute of Medicine] report pointed out is that many doctors never know of their diagnostic errors because they never learn the outcome of the case. Patients often go to different places for their continuing care, so doctors never learn what happened. A system that allows for feedback so that mistakes can be identified is critical… Diagnostic error is much more difficult to tackle than medication errors or procedural errors. The sheer number of possible diagnoses multiplied by infinite human variability makes it much less amenable to the checklist approach that works so well with procedures. Nevertheless, as the Institute of Medicine report has pointed out, there are concrete steps that can make the medical environment more conducive to diagnostic accuracy. We should not hesitate to begin implementing them. The adage that 90

> percent of diagnoses are made just by taking a patient's history probably is not 100 percent accurate, but it is pretty close. Focusing on increasing communications with the patient and between medical professionals easily offers the most bang for the buck in terms of preventing diagnostic errors. The other adage worth remembering is that the most important part of the stethoscope is the part between the earpieces. So before I ordered an M.R.I. for my patient, I asked her to tell me the entire story again. I needed to get a certain part of my stethoscope in gear.[17]

In this example, the author discusses a specific medical error but does not focus on negligence on the part of an individual. Rather, the story is about the absence of a robust feedback mechanism to identify errors and allow health care professionals to learn lessons and ultimately change their practices.

The second type, on the other hand, merely described many potential causes of medical error and either briefly mentioned solutions or failed to explain how particular solutions might improve patient safety:

> The health department's report coincided with the publication Wednesday in the journal JAMA Surgery of a study of surgical 'never' events—errors that should never happen. It is estimated that each year, surgeons operate on the wrong body part 500 times and leave unintended items in the body 5,000 times. Poor communication was often the culprit, but there was no good evidence that efforts to prevent these events were effective. These surgical errors are "very rare events, but continue to be a safety concern," Susanne Hempel, a behavioral scientist at the RAND Corp. and lead author of the study, said in an email to the Globe. "We now know more about contributing factors, and we have evidence of some promising approaches to prevent surgical never events." Hospitals attribute rise in errors to reporting.[18]
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> Beyond these changes, Ofri suggests that we need to recalibrate our thinking and realize that failure is a normal part of the human experience. This change will allow us to radically transform our approach to medical error. She cites how the view of the much-maligned bacteria has changed and the microbiome is now appreciated. Ofri parallels this with our behavioral biome. If errors are indigenous to our behavioral biome, we can gather the collective ecology and shift it in our patient's favor. How can we live amongst our errors? We need to fix system errors, but our efforts need to focus on the human elements that are the key to patient safety. She offers that true perfection is acknowledgment of imperfection. If the leaders come forward, it will make a difference. Dr. Ofri asked for the titans of medicine in health care to speak openly about their medical errors, both to the doctors in training, and to the public.[19]

While great emphasis is placed on the prevalence of preventable medical errors in both pieces, there is only a vague mention of "promising approaches," "better systems," and "fixes" that might alleviate the problem. All narrative components are present in this story. However, parts of the story lack enough specificity and concreteness to help nonexperts understand what might be done to improve patient safety.

Communications implications of the latent class analysis

When advocates and the media tell incomplete stories, the public is liable to fill in the gaps in potentially unproductive ways. If the media and organizational materials do not explain how shifts in the health care system can better prevent and address patient safety, the public is likely to fall back on the assumption that adverse medical events are natural and unavoidable—an unfortunate but inescapable reality of health care.[20] Moreover, it invites the public to apply an individual-level lens to its understanding of patient safety, blaming the failings of ineffective or undedicated doctors for medical errors.

Stories that highlight the patients' role in improving health outcomes may contribute to the public's difficulty in seeing the structural and systemic dimensions of patient safety. Some of the organizational materials place sole responsibility on patients to advocate for themselves in order to protect themselves from medical error. These kinds of communications will likely trigger consumerist understandings of the patients' role in the health care system and their responsibility to choose caring doctors whom they like and trust. These dominant assumptions are likely to lead the public to think that it must be the front line of defense from bad or ineffective doctors. To pull the health care system into view, experts and advocates should emphasize that health care policies and protocols create contexts in which patient involvement is more or less possible.

Media materials fail to build public support for preventive solutions to address patient safety. By advocating for penalizing and removing bad doctors from the health care system, the litigation class of media materials is likely to constrain the public's understanding of *why* medical errors happen and what to do about them. They obscure the role of the health care system and medical culture in contributing to patient safety, instead assigning blame to individual actors (doctors, nurses, or hospital staff). Critically, these kinds of stories do not explain how the institutional context and culture in which health care professionals operate shape their behaviors. For example, these materials generally fail to describe how health care protocols contribute to and exacerbate patient safety issues.

A lack of explanation leaves the public either unaware of what patient safety is and how it works or making assumptions. When people are not provided with explanations, they are unable to think through cause and effect in the way that experts do. This means that they will rely on existing explanations of why adverse medical events occur and what can be done to address them. This dimension of the existing discourse on patient safety also means that important communications opportunities are missed.

Recommendations

The recommendations below suggest opportunities for patient safety advocates and others working on the issue to enhance the effectiveness of their communications. We realize that shifting the media discourse and public conversations on patient safety is challenging, and patient safety organizations are already doing a lot of work to disseminate a more expert-like understanding of patient safety to the public. However, as FrameWorks has seen in our work on early childhood development, education, and other issues, an effective core story that is consistently told by many different people and backed by important, influential organizations can introduce messages into public conversations,[21] changing the discourse over time. We suggest the following to begin that process.

Use the phrase "patient safety" and leverage the power of repetition to raise the salience of the issue. People cannot talk about patient safety or advocate for better programs and policies unless they know what the issue is called. At every opportunity, advocates should use the phrase "patient safety" to raise awareness of the issue. If the phrase "patient safety" is unsatisfactory, new terms or phrases can be developed and tested for their effectiveness. Regardless, the field should be clear, consistent, and repetitive with its terminology. By doing so, advocates have the best chance of raising the salience and importance of patient safety in people's thinking.

Tell complete stories that articulate the causes of and solutions to patient safety. Communicators need to tell complete narratives about patient safety that clearly align causes, effects, and solutions. Improving outcomes for patients depends on coordinated action across every level of health care and health care policy. Without a clear understanding of the causes of adverse medical events, public support for these systems-level changes will remain low. Similarly, in the absence of any information on how patient safety can be improved, the public is likely to experience a deep sense of fatalism about how medical errors can be addressed. Complete stories are therefore necessary to foster public understanding of how problems arise *and* provide concrete and actionable solutions to tackle those problems.

Explain how medical errors can be prevented. Widespread media coverage of medical malpractice suits may encourage individualistic thinking and undermine public support for patient safety as a systemic problem in health care. These stories are likely to cue unproductive thinking about medical professionals as either competent or incompetent and invite the public to think fatalistically about the possibility of change. Instead, advocates need to be clear about how medical errors can be *prevented* by making it clear that the behaviors of medical professionals are shaped by the policies and protocols of the systems in which they operate. Therefore, making changes to those systems is likely to reduce the incidence of adverse medical events.

Explain the role of the health care system in empowering patients. To communicate effectively about a patient's role in preventing medical errors, communicators should always keep the health care *system* in view, rather than place responsibility solely on the shoulders of patients themselves. By highlighting the

role of individual choice and decision-making, advocacy articles employing a patient responsibility frame risk cuing cultural models that suggest that medical errors can be avoided if patients are more discerning consumers. When this way of thinking is operative, people will find it difficult to engage in discussions about steps that the health care system can take to empower patients. Communications efforts should focus on contextualizing patient responsibility and make it clear that when patients advocate for themselves, it is within systems that constrain or facilitate their ability to have agency in their own health care choices.

Lead with a value to emphasize *what* patient safety is about, and *why* it matters. When media and organizational materials describe patient safety, they usually do not explain why it affects all of society. In the absence of statements that explain the collective importance and impact of patient safety, the public is likely to view it as an issue of individual rather than public concern. This orientation is a major impediment for understanding the large-scale policy measures that might improve patient safety and reduce rates of medical error. When communicators talk about this issue, they need to do so in a way that emphasizes that patient safety has implications that reverberate across society.

Always adopt an explanatory approach. Media and organizational materials often *describe* a problem or situation (often by using lists, etc.) but do not *explain* it. Organizations' listings of patient safety issues can be problematic because they allow the public to fill in causes, responsibility, and so forth using its cultural models, which might not be what the organizations intended. Communicators need to make sure they explain *how* adverse events can happen and *how* specific solutions can help prevent and address such events.

Avoid myth/fact communications, especially related to the issue of punishment. Experts and advocates must be careful when they seek to correct misunderstandings about patient safety among members of the public. Research across the social sciences has shown the potential pitfalls in devoting valuable communications real estate to debunking myths. People are more likely to remember things that they already believe. Reminding the public of what it already thinks—even in the form of a correction—can actually reinforce the misinformation. While the best way of correcting misinformation remains an empirical issue requiring further testing, previous research suggests that the safest course of action is to always make the affirmative case before any kind of debunking. This means that advocates must focus on explaining how their proposed solutions would advance patient safety and forego the temptation to spend time and space explaining why punishment is not effective.

Use every communication as a valuable opportunity to reframe the issue of patient safety. To build support for system-wide reform, communicators need to embed facts and statistics within a coherent story that uses an orienting value to explain *why* patient safety is important, explain *what* causes adverse events, and provide a clear statement about appropriate solutions.

Conclusion

This report shows that "patient safety" is not a phrase that exists in popular discourse outside of advocacy, research, and practitioner communications. However, patient safety continues be a significant health care issue, and adverse events are prevalent. Experts and advocates find themselves at a critical communications juncture. They must raise public awareness of their issue. *How* advocates increase awareness—how they define the problem, the explanations they introduce, and the way they present solutions—will have lasting effects on public understanding and engagement. The frames that advocates advance will shape how this issue moves forward and whether Americans understand patient safety as a private problem that can only be addressed through individual action or as a preventable health issue.

This report also shows that merely repeating the phrase "patient safety" or simply mentioning systems-level causes and solutions are not enough. Experts and advocates need a comprehensive story. Unless a more visible, more informed conversation on patient safety is cultivated, it will continue to be difficult to advance the systemic changes needed to improve health outcomes for all. With a complete story, communicators will be in a better position to ensure that all patients are safe.

About the FrameWorks Institute

The FrameWorks Institute is a think tank that advances the nonprofit sector's communications capacity by framing the public discourse about social problems. Its work is based on Strategic Frame Analysis®, a multi-method, multidisciplinary approach to empirical research. FrameWorks designs, conducts, publishes, explains and applies communications research to prepare nonprofit organizations to expand their constituency base, build public will, and further public understanding of specific social issues—the environment, government, race, children's issues and health care, among others. Its work is unique in its breadth, ranging from qualitative, quantitative and experimental research to applied communications toolkits, eWorkshops, advertising campaigns, FrameChecks® and in-depth study engagements. In 2015, it was named one of nine organizations worldwide to receive the MacArthur Foundation's Award for Creative & Effective Institutions. Learn more at www.frameworksinstitute.org.

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The following researchers contributed to this report, in alphabetical order:

Daniel Busso, EdD, Researcher; **Leann Down,** MPP, MSW, Research Analyst; **Marissa Fond,** PhD, Assistant Director of Research and Senior Researcher; **Clara Gibbons,** BA, Research Analyst; **Kevin Levay,** PhD, Researcher; **Moira O'Neil,** PhD, Director of Research Interpretation and Application.

Endnotes

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[2] Under the LexisNexis "Medicine & Health" index code, the following search terms (including inflection for plural versions, etc.) were used to construct the sample: patient safety, medical safety, health care safety, healthcare safety, medication safety, medical error*, diagnostic error, medication error, surgical error, medical mistake, diagnostic mistake, medication mistake, surgical mistake, patient harm, medical harm, quality of care, medical malpractice, doctor malpractice, patient lawsuit, doctor lawsuit, surgeon lawsuit, surgery lawsuit, medical lawsuit, healthcare lawsuit, health care lawsuit, hospital lawsuit, medical complication, health care complication, healthcare complication, medication complication, diagnostic complication, and surgical complication.

[3] In this report, we refer to these items as *organizational materials*.

[4] We sampled the following organizations: Betsy Lehman Center, Agency for Healthcare Research and Quality, The Hastings Center, The Joint Commission, Institute for Healthcare Improvement, National Patient Safety Foundation, Institute for Safe Medication Practices, Centers for Disease Control and Prevention, The Risk Authority, Patient-Centered Outcomes Research Institute, CRICO, Children's Hospitals' Solutions for Patient Safety Network, Patient Safety Movement, The Arnold P. Gold Foundation, American Medical Association, Armstrong Institute for Patient Safety and Quality, National Quality Forum, ECRI Institute, Coverys, National Academy of Medicine, Centers for Medicare and Medicaid Services Innovation Center, Medically Induced Trauma Support Services, US Food and Drug Administration, Massachusetts Coalition for the Prevention of Medical Errors, Commonwealth Fund, and Gordon and Betty Moore Foundation.

[5] Please note that approximately 4 to 24 possible codes were available for each narrative component, depending on the component. The examples listed here are only a short subset of the full codebook.

[6] In this section, we refer to items in the samples as *materials* and occasionally as *communications* (to refer to an article, blog post, web page, or any variety of text included in the analysis).

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