Safety Is More than Caring

Mapping the Gaps between Expert, Public, and Health Care Professionals Understandings of Patient Safety

A FrameWorks Research Report

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Introduction

Patient safety—the prevention of harm to patients[1]—is an important issue in American health care and a crucial part of what it means to offer and receive quality care. Yet the public, and to a striking degree, health care professionals[2] themselves, do not fully recognize the scope and implications of the issue. Addressing public and health care professional understandings is not simply a matter of providing more information or additional evidence. People's difficulty in understanding patient safety and the potential initiatives that can drive improvements are rooted in deep assumptions about doctors and other health care professionals, attribution of responsibility for health, humanity, and human error, and how systems shape outcomes. These assumptions and largely implicit understandings lead to a consistent underestimation of the problem and impede engagement with systemic solutions.

This report explores how members of two key groups—members of the public and health care professionals—draw on these assumptions and beliefs to reason about patient safety. If advocates better understand how these groups think about patient safety, they can anticipate reactions to messages and develop communications materials that can spark a more productive conversation about patient safety—one that deepens understanding and builds support for solutions.

To understand what the public and health care professionals *should* understand about patient safety, we first distill the *expert story* of patient safety. This story comprises the core ideas that experts in the field believe the public and health care professionals must understand to address the issue. We then describe the cultural models[3]—or shared, implicit understandings, assumptions, and patterns of reasoning—that underlie how the public and health care professionals think about patient safety. Working from more than 1,000 pages of interview transcripts, we investigate predictable patterns of thinking that members of the public and health care professionals use to form opinions and reason about patient safety. We do this by examining patterns in how people talk about the issue.

FrameWorks designed and conducted this research in close partnership with the Betsy Lehman Center for Patient Safety. The goal of this multi-method project is to develop a wide-reaching reframing strategy to change public and professional discourse around patient safety and advance solutions. The analysis reported here aims to uncover how experts, members of the public, and health care professionals understand issues relating to patient safety and health care quality, and lays the groundwork for subsequent reframe development. This report proceeds as follows:

- We outline the expert story of patient safety. This story reflects the field's understanding of what patient safety is and who is responsible for it, what causes patient harm, and what can be done to improve patient safety. It is the content that must be communicated to the public and health care professionals via a reframing strategy.

- We describe the cultural models that shape how members of the public and health care professionals think about patient safety.

- We then map the gaps between (1) expert and public perspectives and (2) experts and health care professionals' perspectives, describing points where understandings overlap and diverge. This analysis highlights key challenges to communicating about patient safety and yields a set of initial communications recommendations to overcome them.

- Finally, we present a set of questions for future research.

A description of research methods and participant demographics can be found in the appendix.

The Expert Story of Patient Safety

This section distills the key themes that arose during interviews with leading experts in the field of patient safety. These themes comprise the expert story of patient safety in the United States. This story is not intended to replace literature reviews or white papers that cover the state of the art of patient safety. Rather, it distills the core points that experts want the public and health care professionals to understand. It provides the baseline against which we compare public and professional understandings of patient safety and will provide the content that framing and communications strategies must convey to be considered effective.

This story is organized around the following questions:

- What is patient safety?
- What causes patient harm?
- Who is responsible for patient safety?
- What needs to happen to improve patient safety?

1. What is patient safety?

In the past, the field has used varied terminology to define patient safety. However, the field has recently converged on the following understandings, as reflected in experts' comments.

- **Patient safety is the prevention of harm related to medical care.** Patient safety pertains to: (1) preventable harm that (2) relates to medical care. If harm could not have been prevented (e.g., a patient had an unpredictable allergic reaction to a new drug), then it is not an issue of patient safety. Similarly, if harm resulted from the *natural course* of a medical condition rather than the *medical care* she or he received, then it is not a patient safety issue.

- **Patient safety is compromised by errors of *commission* and *omission*.** Adverse events—unintended injuries that happen during medical treatment that lead to undesirable outcomes—include errors of both commission (e.g., a surgeon removes the wrong leg, or a pharmacist dispenses the wrong drug) and omission (e.g., a health care professional fails to read a patient's complete medical record, or staff neglect to follow up on a test result). Thus, adverse events result not only from *active* mistakes but also from *passive* ones—failures to take steps required to provide care that meets standards of quality practice.[4]

    - **Adverse events have various degrees of consequences.** Harm can range from mild (i.e., an error has a minor effect and is easily correctible) to severe (i.e., a patient suffers irreparable damage or death).

    - **Adverse events have physical or psychological consequences—or both.** While many adverse events cause physical injury, the psychological consequences are important as well, as both may have effects on overall wellbeing.

    - **Adverse events happen in both inpatient and outpatient care settings.** The probability of certain types of adverse events differs based on the setting. For example, errors of commission are more common in inpatient settings, while errors of omission are more common in outpatient care.

    - **Adverse events are prevalent in the health care system.** While advances have been made, patient safety is still a significant problem, and adverse events are common in the health care system. Estimates vary widely, but some estimates put the death toll at some 250,000 a year[5]—making medical error the third leading cause of death in the nation.

2. What causes patients harm?

Patient harm is caused by many interrelated factors. While the causes of adverse events vary by circumstance, the following points characterize the key, underlying threats to patient safety.

- **Patients and professionals lack easy access to information.** Despite advances in electronic health record (EHR) technology, patient information is not well coordinated or well communicated between and among patients and providers, and information is not efficiently or completely transmitted as patients move through the system. Health care professionals have difficulty obtaining records from other facilities and specialists. And EHR systems often don't talk to each other, leaving health care professionals without access to their patients' medical histories. Patients with complex conditions often require attention from teams of specialists, but these teams often fail to share information or coordinate care. As a result, health care professionals often provide care with incomplete information, which increases the likelihood of adverse events.

- **Health care is fragmented and discontinuous.** Patient care rarely begins and ends with a single visit to a single health care professional; rather, care often requires multiple appointments with different professionals who provide input over periods of weeks or months. These visits are often not coordinated. For example, adverse events often occur after patients are discharged from the hospital because they don't receive follow-up care in outpatient settings. This is due to a lack of continuity and integration of care—not a lack of professionalism in outpatient settings.

- **Systems lack standardized safety protocols.** Patient safety is not determined by individuals, but rather by the systems in which they work. For example, systems with inconsistent protocols for routine processes like surgery preparation and infection control have higher rates of adverse events. Systems can—and should—be designed to limit mistakes. Missing protocols and poorly designed systems make adverse events more likely.

- **Health care culture doesn't support safe practices.** There is a role for culture in promoting—or undermining—patient safety. Health care culture can impede the identification of impending mistakes and can inhibit error reporting. Experts described a culture that systematically undermines patient safety—one that accepts bullying of junior staff, competition between new doctors, asymmetrical power dynamics among health care professionals and between professionals and patients, and self-preservation tendencies among health care professionals that result in, for example, difficulty speaking out. This culture puts patients at risk because it inhibits patients and health care professionals from questioning possibly harmful decisions or inactions.

- **Professionals face pressure to be productive and conserve resources.** Productivity and safety are often at odds with each other. Because health care facilities are incentivized and under pressure to see as many patients as possible, professionals often don't debrief one another or answer all of their patients' questions. These activities promote patient safety, but they take time—making safety an expensive goal. From the perspective of a health care facility's board, patient safety can, at first, seem like an impediment to financial health. Individual organizations aren't the only ones that face financial pressures; the pressures are systemic. At the federal level, agencies like the Food & Drug Administration lack adequate funding to conduct surveillance activities and research initiatives that have the promise to improve patient safety.

3. Who is responsible for patient safety?

Experts emphasized that everyone involved in health care is responsible for patient safety. More specifically, responsibility falls to the following key groups:

- **Health care leaders.** Senior leaders of hospitals, clinics, labs, private practices, and other facilities are responsible for achieving safer care. Leaders can create environments that promote safety by:

(1) participating actively in care (e.g., routinely attending rounds, meeting with employees across departments) to emphasize the importance of safety and respond to problems; (2) investing in the creation and implementation of safety protocols; (3) breaking down silos and creating systems that enable teamwork across organizations; (4) making clear that intimidation of staff or patients or covering up adverse events is not tolerated; and (5) making patient safety a clear and unambiguous priority. Modeling these ideals will "trickle down" from leaders to all staff.

- **Health care professionals.** Systems and cultural factors play an essential role in patient safety, but individuals also bear responsibility. Health care professionals have a clear and important responsibility to stay abreast of best practices in patient safety and to raise potential hazards with colleagues if and when they see them.

- **Patients and families.** Patients and their family members cannot bear responsibility for safety, but they do have a role to play. Family members sometimes provide health care or assistance to patients, and therefore, become active participants in patient care. In a complex system, patients are sometimes the only ones who see the whole picture of care. They have a vital role to play in protecting themselves from adverse events.

- **Government officials.** The government funds research on patient safety, structures insurance reimbursement policies to incentivize safe practices, sets standards and rating systems that reflect safety at hospitals and other health care facilities, and institutes regulatory policies. In these and other ways, the government has an important role to play in promoting safety.

4. What needs to happen to improve patient safety?

Coordinated action must be taken at every level and across every domain of health care and health care policy, but there is no magic bullet to ensure patient safety. At the same time, adverse events *are* preventable; it *is* possible to substantially reduce them in number and severity.

- **Improve systems for information sharing.** Improving communication is perhaps the most important step in advancing patient safety. Information should be constantly and easily shared among all who are responsible for patients' wellbeing (e.g., clinicians, staff, family members, and patients themselves). The "hand-off"—when health care professionals pass responsibility for patient care to other professionals—is one example of an important communication opportunity. Hand-offs are good opportunities to assemble all members of patient care teams, ask and answer questions and comments, and confirm treatment plans. Protocols should ensure that (1) ample time is set aside for hand-offs; (2) information is shared (e.g., via a checklist); and (3) all members of the health care team, as well as the patient and family members or advocates, have the opportunity to ask questions.

- **Change the culture of health care, starting from the top.** As described above, culture plays a crucial role in patient safety, as it strongly influences the entire ecosystem in which care takes place. A "culture of safety" includes important interrelated factors:

    - **Leaders encourage open communication.** Health care professionals may be tempted to cover up adverse events to avoid repercussions and protect colleagues. Leaders therefore must create a climate that encourages information sharing—even when it involves adverse events. They can do so by leading open, frank discussions of adverse events on a regular basis.

    - **Promote and nurture psychological safety.** A culture of safety requires "psychological safety"—mutual respect and acceptance among health care professionals, patients, and family members. This means changing harmful habits and norms, such as the reluctance to speak up for fear of being labeled insubordinate. Junior staff (e.g., nurse's aides, janitors, residents, etc.) and patients must understand that they can and should question decisions or actions taken by doctors and others in positions of authority. These habits must be reinforced and normalized across all health care settings.

    - **Foster individual accountability.** Accountability is not "blame." All health care professionals need to know that they are responsible for the mistakes they make and for reporting others' mistakes.

    - **Question current systems and demand continuous improvement.** Because systems are essential for patient safety, they must be questioned and improved by all involved in patient care. Leaders must acknowledge flaws in existing protocols and be open to trying and investing in new ideas.

    - **Prioritize safety.** Safety is not currently a high priority in health care, and other metrics (e.g., patient satisfaction, number of patients served, etc.) are often used to determine quality. Senior leaders must make safety a top priority.

    - **Improve health care education.** To change the culture, it is important to start at the ground level: in school. This is where health care professionals learn not only technical and practical expertise but also how to take on new professional roles. Integrating communication skills into medical, nursing, and other health care professional school curricula will improve patient safety.

- **Activate patients.** Patients must be engaged as full partners in their care; this is called patient "activation." For example, patients should have input on hospital protocols that affect them; have unfettered access to their medical records so they can flag inaccuracies or add information; and be

encouraged to share concerns and ask questions when they don't understand something. Patients and professionals should be allies working toward a common goal: safety. To facilitate activation, patients and patient safety advocates need instructions on how to participate fully in medical care. That said, patient activation cannot be the only, or even the main, solution to patient harm.

- **Make transparency the norm across all care settings.** Transparency includes (1) full disclosure of adverse events among health care team members; (2) clear, consistent procedures and expectations (e.g., disciplinary actions are consistently applied); (3) sharing patient safety information with the public (e.g., via websites); (4) accessible and comprehensible information (e.g., translating statistics and technical language into plain language); and (5) sharing the details of adverse events and safety information with other institutions to support sector-wide best practices. Patient privacy expectations and laws like HIPAA (the Health Insurance Portability and Accountability Act), however, present a major challenge to transparency. Nevertheless, this challenge is not insurmountable; it *is* possible to promote transparency and protect privacy.

- **Implement patient safety programs across the country.** All health care facilities should have patient safety programs that clearly measure outcomes. Gathering data to determine where, when, how, and why adverse events happen will improve patient safety. Adverse events must be documented and reviewed on a regular basis so that problems can be addressed and best practices can be developed and shared.

- **Change payment policies.** Insurance companies and governments determine reimbursement rates according to the number of visits patients make and the type of procedures they undergo. Patient safety doesn't factor into these equations, but it should**.** If payers took a more holistic view of health and wellbeing, they would require health care facilities to meet the highest standards of safety to receive full reimbursements. The Centers for Medicare & Medicaid Services has made progress in this area, but further improvement is both possible and necessary.

- **Regulate patient safety.** The federal government and health care facility boards should track adverse events and prioritize prevention by setting standards and using incentives to promote safe environments. Some experts suggested instituting a patient safety regulatory agency. Health care can and should be treated like other high-risk industries, such as transportation and nuclear power, in which safety is a top priority and lapses are not tolerated.

- **Fund and conduct patient safety research. W**hile new steps can be taken now to improve patient safety, a consistent and well-funded research program is needed to better understand how to promote patient safety, understand the scope of the problem (particularly in outpatient settings, which are often considered more challenging to characterize), and test new patient safety systems.

Public and Health Care Professionals' Understandings of Patient Safety

What are the dominant cultural models—the shared but implicit understandings, assumptions, and patterns of reasoning—that inform the public's and health care professionals' thinking about patient safety? Understanding how people think about patient safety enables communicators to anticipate how people interpret information, formulate opinions, and make decisions about this issue. Armed with this knowledge, communicators can better frame their messages to increase understanding and engagement and avoid messages that lead people in unproductive directions or that result in disengagement.

We begin by describing an overarching contrast that influences the thinking of the public and health care professionals. We then describe the cultural models that structure thinking about patient safety. While these models are largely shared, there are some important differences between how members of these two groups think about this issue. Throughout this report, we clarify whether cultural models are used by one or both groups and point out similarities and differences in thinking.

A Key Contrast: Humans vs. Systems

Before we discuss specific cultural models, we want to flag an important contrast between *humans* and *systems* that cuts across thinking about health, health care, and safety. Both groups understand humans and systems in opposition to one another. In other words, they are assumed to have fundamentally different—and opposing—characteristics. This table summarizes key assumptions:

Humans	Systems
Caring. Humans have the capacity to care about others. Caring is understood as the fundamental basis of quality health care.	**Uncaring.** Systems lack the capacity to care.
Creative and flexible. Humans are natural problem-solvers, able to think on the fly and apply creative solutions to novel problems.	**Rigid.** Systems do not flexibly adapt to specific circumstances. They have a rigidity that creates inefficiencies and impedes progress toward effective, personalized care.
Personalized. Human beings can attend to individuals' particular needs.	**One-size-fits-all.** Systems do not treat people as individuals; they treat them all the same.

Perceptive. Humans can evaluate trustworthiness and recognize the strengths and weaknesses of individual actors.	**Undiscerning.** Systems are incapable of seeing and responding to patients' and professionals' unique characteristics.
Inefficient. Humans are frequently inefficient, due to the messiness of human interaction.	**Efficient.** Systems are efficient and economical.
Fallible. Perhaps most importantly, humans—because they are human—make mistakes.	**Regulated and less fallible.** Systems can be standardized and regulated to maintain best practices.

While the public and health care professionals attribute positive and negative characteristics to both humans and systems, research participants expressed a general preference for care provided by humans and a suspicion of systems. While people appreciate the necessity of systems and the advantages that come with formal, regulated processes, they are also skeptical of systems' ability to provide high-quality care. This leads to what is arguably the most important challenge that advocates for patient safety face: **building an understanding of and support for the role that systems play in improving patient safety**. Communicators must help members of the public and health care professionals understand how well-designed systems can make it easier for humans to improve patient safety. This will require framing strategies that simultaneously pull productive ways of thinking about systems forward, push unproductive assumptions to the background, and articulate new ways of thinking about how humans and systems interact.

The Consumerism Cultural Model

FrameWorks has found repeatedly that the public understands health in deeply individualistic terms.[6] People assume that health outcomes stem from individual choices about diet, exercise, and lifestyle. When applied to health care, this individualism becomes *consumerism,* or a pattern of thinking about health and health care as something to acquire. The public understands health care as a business and views it through the lens of consumer choice; as such, they think they should try to purchase the "best" possible product and that they should "get" what they pay for. According to this way of thinking, individuals are responsible for making the "right" choices about health care, and patients should be catered to as consumers.

This understanding leads to a set of assumptions about health care quality and patient safety. People think that health care should be made *attractive* to consumers, who have multiple options in a competitive marketplace. They think it should be clean, convenient, and affordable. They think wait times should be short, staff should be friendly, and doctors should be highly skilled. These are factors that make for a good health care "product" and are seen as markers of quality.[7]

> **Participant (Public):** You have the right to more or less shop for where you think [health care is] best, where you're being treated better. If you really don't like it where you are, you can always move on.
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> **Participant (Public):** It's kind of like when you try something on, like when you have to get a shirt. You put it on, and if you're not like, "Yeah, that's awesome"—if you're like, "I think I like it, but I'm not sure"—and then you look and you're like, "Yeah, I think it'll work, I'm going to get it," it's not going to work. You're going to go home later and be like, "Why did I buy it? I should have known." Whereas if you put it on and you're like, "It's just not a question"—I think you should feel that way about clothes and doctors. [LAUGHTER]
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> **Participant (Public):** I would think [quality is] just how patients are treated, how quickly they're in and out, you know. Nobody wants to be in the hospital for a long time. So, can they treat you efficiently, or are you there for a week, you know? When you're there, is it miserable? Is the quality of food okay? Just kind of how you're treated while you're actually there.

The *Consumerism* model leads to a specific understanding of patients' role in health care: that quality care is convenient, comfortable, and comes with good customer service. This focus on the attractiveness and ease of service distracts from people's health *outcomes* and, as we discuss below, blocks communicators' ability to engage in productive discussions about patient safety and reforms to reduce adverse events.

The Inevitable Consumer Cultural Model

There is a similar, albeit subtler, *consumerist* pattern in health care professionals' thinking. Like the public, health care professionals assume that their patients are acting as consumers. They believe that business constraints mean that health care professionals must tend to patient satisfaction—thus, their patients are—inevitably—consumers. Unlike the public, however, health care professionals do not think that good food and pleasant staff are true indicators of quality care. Professionals typically chafe at certain aspects of consumerist thinking—mainly the high priority placed on customer satisfaction and demand. As we discuss below, their model of the professional-patient relationship leaves little room for patient demands on health care professionals. Moreover, they see consumer trappings as a distraction from what is actually at the center of good care: professionals' expertise and the time they spend with patients.

> **Participant (Health Care Professional):** I guess [quality] would come down to patient satisfaction through choice, through options, and through good follow-through, and that they are satisfied with their overall treatment.
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> **Participant (Health Care Professional):** I mean we've been [influenced] by the CMS' [Centers for Medicare & Medicaid Services] patient satisfaction, whatever the patient wants. And, I'm

> sorry, the hospital is not a hotel. These are not clients; they are patients and sick people. And you should be allowed to take care of them in the way that is medically appropriate and not all of this patient satisfaction bullshit. Sorry.
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> **Participant (Health Care Professional):** One of the nonclinical things we have to take care of is patient demand, and so, overuse of antibiotics, for example, is absolutely a question of patients having demanded—over and over again—antibiotics, because that's what they perceive to be the solution.

Communications Implications

These consumerist models carry critical implications for communicators:

- ***Consumerism* blocks thinking about systemic changes to the provision of health care.** The *Consumerism* model limits thinking about patient safety to the individual's personal health care decisions, keeping large-scale policy measures that are integral parts of reducing adverse events out of mind. By keeping people focused on individual choice and consumer responsibility, this model makes it difficult for people to think about the institutional and systemic factors that contribute to—or detract from—patient safety. This means that communicators must be careful when leveraging this model, as doing so is likely to reinforce the focus on individual choice rather than policies, systems, and the culture of health care.

- **Communicators need to continue to encourage the public to take patient safety into consideration when evaluating the quality of care.** The list of factors that people use to evaluate the quality of care is based on consumerist thinking and, therefore, is narrow and lacks a focus on outcomes. Communicators need to frame patient safety and positive health outcomes as fundamental components of treatment quality. This entails giving people a better understanding of what patient safety is, why it matters, and the practices required to promote it. In short, communicators need to make patient safety a fundamental feature of how people evaluate health care quality.

- **The *Consumerism* and *Inevitable Consumer* models lead to a narrow view of the patient role in health care.** In focusing attention on consumer choice and satisfaction, these models make it difficult for the public and health care professionals to envision an expanded role for patients that involves active involvement in care and asking questions of professionals. These models could lead people to misinterpret advocates' calls to improve patient activation, because without reframing the role of the patient, patients will likely understand activation in consumerist terms. Communicators need strategies to get people to think differently about patients' roles and responsibilities.

The Caring Doctor Cultural Model

Members of the public assume that the defining attribute of good doctors is the degree to which they *care* about their patients. The *Caring Doctor*[8] model is similar to a pattern FrameWorks has observed in public thinking about other professionals, like teachers[9] and dentists.[10] This model focuses people's attention on the degree to which a doctor cares about patients, and puts other attributes (e.g., qualifications, technical skills, access to support, etc.) out of consideration. Good doctors are modeled as doctors who (1) spend a lot of time with their patients and are personally devoted to them; (2) remember their patients' names; (3) maintain an encyclopedic knowledge of their patients' medical histories; (4) are immune to pressures from the pharmaceutical industry (i.e., "Big Pharma") and other sources of personal gain. Good doctors are good because they are motivated by personal concern for patients—and nothing else. This dominant model was frequently evoked, top of mind, and powerful in shaping thinking about health care and patient safety.

> **Participant (Public):** The idea that he can remember even our names, to me that makes him a great doctor. You've already got my attention if you've learned my name. You know what I mean? So, I thought he was just awesome. He always remembered the kids, he remembered the husband, he remembered the family as a whole.
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> **Participant (Public):** And it's not just about his credentials; it was really about his spirit, his demeanor, and how kind he was and how interested he was in solving my issue, and that's what gave me the extra reassurance that I was in the right place.
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> **Participant (Public):** I'm looking for a doctor that will listen to you. That's what I care about—a doctor that will listen to you and take interest in what your concerns are.

On the flip side, the *Caring Doctor* model leads members of the public to attribute bad outcomes and adverse events to doctors' *lack* of appropriate caring or concern. For example, people assume that one cause of adverse events is professionals going on autopilot when performing rote tasks, like a common surgery. This reflects a lack of adequate concern for patients; caring doctors wouldn't—and couldn't—go on autopilot because they are deeply interested in each patient.

> **Participant (Public):** The nurse can be daydreaming about whatever, thinking about Facebook, mind somewhere… Peoples' minds can be in many different places when they should be focusing. Same thing with pilots. Your life is in the hands of that pilot, and if he is drinking beer and vodka on the low-low when he should be flying… Same thing with doctors.
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> **Participant (Public):** I think [errors might be caused by facilities being], like I said, understaffed. [Professionals] are maybe underpaid and they just, at this point, don't care.

Health care professionals also drew on the *Caring Doctor* model, but less frequently than members of the public. For professionals, "caring" does not necessarily mean close, personal relationships between professionals and patients, but rather taking work seriously and believing in the importance of supporting good health above all else. This distinction is important. Like the public, professionals assume that caring is a key determinant of outcomes: professionals who care produce good outcomes; bad outcomes are due to a lack of caring or improper motives, such as profit.

> **Participant (Health Care Professional):** What would lead to worse outcomes? I think that there are professionals, unfortunately, that are out there that are in it for profit only. They don't have the mindset of actually caring for the patient. They're looking more at the bottom dollar as opposed to providing excellent patient care.
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> **Participant (Health Care Professional):** Really, you've got to have that trust, the doctor-patient trust. And again, if you're using hired guns that are never there for the rank and file, it's hard to build on that. That's what really makes good health care. And that's why I went into medicine. And I don't think people are going into it for that reason anymore.

Communications Implications

- **The *Caring Doctor* cultural model blocks thinking about how to improve patient safety.** By attributing mistakes narrowly to health care professionals' motivation or character, this model makes it difficult for people to see the role of systems, policies, resources, and supports in promoting patient safety. When thinking with this model, members of the public and health care professionals both assume that if doctors are motivated by the right reasons and attend to patients as individuals, then adverse events should not happen. The assumption that adequate *concern* ensures safety obscures many of the causes of adverse events and many of needed solutions. Communicators should be sure not to over-focus on the caring and concern of professionals. Such strategies may resonate with audiences, but they place a whole a range of causes and solutions out of view. Instead, when talking about doctors and professionals, communicators should be careful to put these individuals in settings and environments that clearly show the ways in which practice is shaped by the systems and context in which care is delivered.

The Authoritative Doctor/Compliant Patient Cultural Model

When thinking about the doctor-patient relationship,[11] members of the public model doctors as authority figures whose directives are to be taken seriously. This professional authority is grounded in people's assumptions about doctors' education and experience; because doctors see many disease cases and perform certain procedures often, they are viewed as experts who simply know what to do. According to this assumption about professions, power, and experience, patients must, in turn, defer to doctors' decisions so as to be compliant. In short, people know deeply that a patient's job is to follow a doctor's orders.

> **Participant (Public):** He is the doctor, you know? I don't have that kind of knowledge. I don't know enough.
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> **Participant (Public):** I think the burden lies a little more on the doctor, because I just don't think people are, on the whole—like, they'll just listen to what they're told. […] I think that the burden really lies on the doctor, because I think there's sort of a blind trust there.
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> **Participant (Public):** When I go in, I just have that trust, that like, okay, I talk to my doctors, and they talk to me, and they have the experience.

This model leads to the narrow understanding that the patients' role is essentially about compliance. A good patient, under this definition, discloses all relevant information and complies with the doctor's instructions.

Health care professionals use this same model to understand their roles and relationships with patients. Professionals assume that errors happen because some professionals haven't been adequately trained to do the work assigned to them, which means that they do not have enough knowledge or experience to be fully authoritative. When this cultural model is activated for health care professionals, it elevates their trust in their own decision-making and their belief that they know best for their patients. It also leads them to emphasize patient compliance as a requirement for good outcomes and patient safety; good patients must report any allergies or side effects that could have adverse effects, and they must follow a doctor's instructions.

> **Participant (Health Care Professional):** I think patients are responsible for going along with the postoperative instructions. So, if I tell you to do something after surgery, you should do that. If you don't do that, something bad may happen. So, if I fixed your hernia and asked you not to lift and the next day you go back to work carrying wheelbarrows full of bricks, your hernia will come back. If you go home from your surgery and you rub cat poop in your wound, you will get a wound infection.
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> **Participant (Health Care Professional):** [Patients] should be responsible for following through with the care that the doctor has prescribed for them. If he orders tests for them, making sure that they get those tests done… If he prescribed medication, taking the medication as he prescribed.

Communications Implications

- **The *Authoritative Doctor/Compliant Patient* model impedes support for patient engagement and activation.** By assigning patients in a subordinate position and creating an unbalanced power dynamic, this model makes it harder for both the public and health care professionals to see any

role, beyond adherence, for patients in their own care. Questioning health care professionals does not fit within this model. To avoid accidentally triggering this understanding of the doctor-patient relationship, communicators should focus considerable attention on explaining the idea of an *activated* patient. Without a better understanding of the patient's role in preventing adverse events and improving safety, following directions will remain the only way that members of the public and health care professionals can see a role for the patient.

- **The *Authoritative Doctor/Compliant Patient* model places systems and standards in the background.** Like the *Caring Doctor* model, this model keeps the focus at the individual level—on the dyadic doctor-patient interaction. If doctors know best, then ensuring quality involves having patients follow instructions and not get in the way of their own care. Again, the role of larger systems, procedures, supports, and culture is out of view and the solution remains firmly grounded at the individual level.

The To Err is Human[12] Cultural Model

When asked to explain why adverse events happen, a consistent pattern emerged: making mistakes is part of human nature. Underlying this response is the deep assumption that not only will people make mistakes, but that it is impossible to prevent or mitigate human error in any systematic or meaningful way. Mistakes are simply a part of life and, in turn, adverse events are, at least at some level, inevitable.

The model creates an unresolvable tension in people's thinking: if the best care is *human* care, in which caring and authoritative professionals are in charge, and humans will always make mistakes, the best system is one that is inherently prone to medical error and adverse events. From this perspective, creating complex systems in efforts to avoid mistakes is not only hopeless, given that error is inevitable, but also threatens to undermine the quality of care by making it less personal.

> **Participant (Public):** Mistakes happen. They are going to always happen. Nothing is ever going to be perfect. In every walk of life, everything, there's mistakes at times. I guess you just hope it's not you. The percentage is small so the odds are it won't be you, but I'm sure somebody is getting sued this year, some hospital.
> --
> **Participant (Public):** When you're a human being, sometimes shit ain't going good that day. You know what I mean? You had a fight with your spouse or your kid died two months ago. You know, your dog ran away that morning, and you're freaked out. So how perfect does somebody have to be? When you realize that sometimes things just happen, there's really nobody to blame.

This dominant cultural model was also part of the way that health care professionals reasoned about patient safety. They assumed that human involvement makes errors unavoidable and thus unpreventable.

> **Participant (Health Care Professional):** These checklists are getting more and more and more sophisticated as they are finding out more from studies. They are getting more sophisticated. But the reason is always human error.
> --
> **Participant (Health Care Professional):** A lot of this is human error. […] The more people you get involved, the likelihood of errors might multiply.

This model was somewhat stronger in professionals' thinking than in the public's. Because they had a richer knowledge and understanding of what health care facilities do to keep patients safe, compared to the public, health care professionals assumed that everyone is doing everything possible and that any remaining errors are a function of human error and of the inevitability of mistakes.

Communications Implications

- **The *To Err Is Human* cultural model leads to fatalism, the perception of the inevitability of error, and maintenance of the status quo.** When thinking with this model, people think that patient safety cannot be meaningfully improved and adverse events cannot be prevented. This leads to a fatalism about adverse events. To inoculate against it, communicators need strategies to explain how good systems and protocols can *predict* and *catch* mistakes before they happen—that systems have the power to prevent human error. When communicating with health care professionals, advocates must take care to put at least some responsibility for adverse events on systems rather than individuals. Messages should point to the ways that errors result from systems and protocols that fall short and explain how better systems can reduce error.

The Attention Overload Cultural Model

When thinking about why mistakes happen, public participants frequently talked about attention overload. Members of the public consistently assume that cognitive and attentional energy is limited in quantity. Therefore, if professionals are dealing with too many other demands or face distractions, their ability to focus on specific aspects of their jobs will be, by definition, reduced. If attention is a limited resource, then heavy workloads or distractions (such as personal problems or work-related stress) drain resources from people's attention "tanks." Participants recognized that the current health care system "overloads" professionals in a variety of ways and leads to error.

> **Participant (Public):** They [doctors] work long shifts. I think they work like 12-hour shifts. I work 8 hours and I'm tired. When you work 12 hours, especially in an emergency ward, or even if you are just operating, you know, operation after operation, it's not only long hours, it's got to be very stressful. Because the stakes are so high. Sometimes they make a mistake.
> --

> **Participant (Public):** I think when they have high volume and people are spread really thin, you are going to have a lot of things go wrong because they just can't keep up with the workload, and then instruments don't get sterilized quickly enough and things like that.
> --
> **Participant (Public):** I think doctors must have so much on their mind with thinking about caring for so many people that they're trying, like I said, to fit so much into the day and to finish everything they have to do that it was just overlooked or something.

Health care professionals share the assumption that cognition and attention are a limited resource and, thus, overwhelmed professionals are more likely to make a mistake.

> **Participant (Health Care Professional):** Staffing is important simply because there's only so much that one person can do. So, if you are asking a nurse to cover 10 critically ill patients, obviously the quality will be poorer because the attention of that person will be split to such an extent that his or her focus will be divided and that quality that that person can provide would certainly not be the same if one staff member had two patients.
> --
> **Participant (Health Care Professional):** When you have more stress, you are likely to make more errors.

This model led both members of the public and health care professionals to a specific set of solutions: hiring more professionals, keeping shifts shorter and more manageable, and relieving professionals' burden.

Communications Implications

- **The *Attention Overload* model is productive, but limited.** When thinking with this model, members of the public and health care professionals generate many ways to improve patient safety (e.g., more staff, more frequent breaks, and mental health support). This focus on reducing burden and increasing capacity aligns with expert thinking. However, this model does not bring into view the role of systems; solutions to the problem of overload typically involve focusing on the people. In other words, people think patient safety is essentially a human problem with a human solution. This model calls attention to the importance of adequate staffing and breaks, but it does not help people see the wider range of systems needed.

The Faceless System Cultural Model

Many participants talked about patients getting "lost in the system"–how files get misplaced, names mixed up, and medications sent to the wrong place, all of which put patients in danger. The underlying assumption is that the system is large, impersonal, mechanistic, intimidating, and mysterious—a black

hole that can swallow people and information. Here again we can see how systems are modeled in opposition to humans; the system is cavernous, impersonal, and unknown, while humans are concrete, knowable, caring, and "good." As a result, people see hospitals as less safe than primary care practices or other small facilities; hospitals are more like systems, while primary care practices are more human-centered and led by doctors.

> **Participant (Public):** I think things can get lost in the sauce if there's too many people.
> --
> **Participant (Public):** You could get lost in the system a little bit […]. When you're talking about something as important as your health, it's a whole lot easier to be in charge of four or five guys than it is to be in charge of 30 or 40 guys.
> --
> **Participant (Public):** Quality to me would be that you would be able to talk to your physician, he would listen to you. Not that he's in a hurry to try to get over here and get over there, you know? Because it's like an assembly line. You know what I'm saying? The assembly line health care is no good.

Given their deep familiarity with the system, health care professionals had a greater understanding of how systems work and how they can prevent errors. However, health care professionals drew on a *version* of the *Faceless System* model when talking about specific aspects of health care. While the public assumed that errors occur when patients get lost in one massive "black box" of health care, professionals focused on specific systems. Professionals, for example, cited electronic health records (EHRs) as a complicated computer system where lack of transparency can cause error. Like members of the public, professionals assume that systems contribute to errors because they make health care less personal. The impersonal nature of systems jeopardizes quality and can cause error.

> **Participant (Health Care Professional):** The bigger chance for an error, I would say, would be actual patient documentation. I could see that happening easily. Not in actual patient care. I don't usually finish my documentation; it's tough to finish it on time because you are trying to see people, so it's not like you're finishing everything on a patient before they leave. So sometimes I write down what I can, I start what I can, but when I get on the computer later I think, "Oh what the heck. Was that this guy or that guy?" Sometimes it takes a second to remember what you saw and you know if you did the injection on this guy or that guy. So, I'd see an error in documentation happening probably a lot more frequently than the error in actual patients there.
> --
> **Participant (Health Care Professional):** [EHRs are] gonna kill primary care. You have 256 things you have to put on a computer record in the course of a patient visit to get paid in a 10-minute visit. It simply cannot be done.

The Fragmented System Cultural Model

In addition to problems caused by inherently impersonal and opaque features of systems, some professionals see error as a result of a specific and modifiable feature of current systems: their high degree of fragmentation. According to this assumption, coordination and continuity are important to safety; the fragmentation that characterizes many current health care systems makes information more difficult to share and causes problems.

> **Participant (Health Care Professional):** Every system is different. Every electronic health record is different and every iteration of every health record is different. So, if you use EPIC at a rural hospital in Colorado, it will look nothing like EPIC that you are using at [hospital name deleted]. They don't translate to it just because they've used it at one place; it doesn't mean it's going to look anything like itself when I use it somewhere else.

When thinking with this model, health care professionals did not see systems as inherently detrimental to the provision of care. Rather, they identified the fragmented state of health care systems as a problem and could see the integration of systems as one patient safety solution.[13]

> **Participant (Health Care Professional):** [If you're] looking to try to make improvements on patient safety, trying to get some of these computers to talk with each other in a way that's meaningful and that can get that information back and forth might be very, very helpful. But it has to be done, I guess, in a way that doesn't just become overwhelming or white noise.

Communications Implications

- ***The Faceless System* model leads both the public and health care professionals to see inherent characteristics of systems as direct threats to health and safety.** When thinking with this model, the public does not think about systems and system change as important for—or even related to—patient safety. This is because systems are seen as inherently threatening. Similarly, when health care professionals are using this model, they see systems as a cause of adverse events—rather than as a way to improve patient safety. These models are both dominant and unproductive, especially when used by the public. Communicators should take care to avoid framing systems as "black boxes," as happens in discussions that describe systems as vast, mysterious, or impersonal.

- **The *Fragmented System* model can provide a clear sense of the problem and an important solution.** This model gives communicators the opportunity to explain how problems with care coordination systems can cause errors and how better systems that integrate information and care can reduce errors. This gives communicators the chance to make an important point: many adverse events result from poorly designed systems that can be redesigned to prevent error.

The Monitor and Punish Cultural Model

When thinking about who is responsible for patient safety, the public tends to implicate the "higher ups"—hospital administrators and managers and heads of primary care practices and health care facilities. Supervisors are seen as responsible for *monitoring* and *disciplining* employees. That is, leaders can protect patient safety by carefully monitoring personnel and firing or disciplining those who make mistakes or who don't measure up.

This model is grounded in the *Caring Doctor* and *Authoritative Doctor* models, which assume that quality care and adverse events are a function of characteristics of professionals—not the system within which they work. The only way to improve patient safety, then, is to identify professionals who deliver low-quality care and remove them or use disciplinary practices to change their behavior.

> **Participant (Public):** Remove that person from that. They need some counseling. Put them somewhere else, let them do something less important in that space, and replace them with someone fresh. And maybe even cycling these people, just like in the military.
> --
> **Participant (Public):** If it was my doctor, replace him with a better doctor and maybe discipline this guy or fire him or something if he is really that bad.

This model shaped one of the few ways that the public thinks about *preventing* error. The only way to prevent errors, according to this line of thinking, is to punish health care professionals who make mistakes. This deters others from making mistakes or removing those who have committed a series of infractions to prevent subsequent errors and adverse events.

> **Participant (Public):** I think for serious mistakes there should always be consequences because that's the only way you learn to not make them again.

The *Monitor and Punish* cultural model was not shared by health care professionals. Health care professionals assumed that micromanagement by administrators and punitive measures would not likely improve health care quality, as did the public.

Communications Implications

- **Punitive thinking limits thinking about prevention.** The *Monitor and Punish* model focuses attention on one type of preventative action—firing individuals who have made mistakes to prevent subsequent errors—and leaves little room for considering other, more productive, strategies that can prevent adverse events. Expanding thinking about solutions beyond punitive measures against health care professionals requires carefully explaining the range of systemic factors that contribute to adverse events and thus that can be addressed to prevent medical error.

A Note on Malpractice

Public participants' and health care professionals' thinking about malpractice claims and lawsuits varied. However, there was a clear belief that *lawsuits are not an effective strategy for improving patient safety.*

For the public, malpractice was often thought about through the *Caring Doctor* model. People believed that doctors should be able to care for patients without the threat of malpractice and that this threat actually impedes their ability to deliver quality, caring, personal, health care. Malpractice, essentially, is understood as a distraction from caring.

> **Participant (Public):** It [the threat of malpractice] makes [professionals] less effective. I think if you're worrying about anything in life, it makes you less effective at whatever you're doing. It's easier for somebody to perform their job knowing that their job is safe, knowing that they're not having to second guess or watch over their shoulder every five minutes because they're going to end up getting in trouble for something that they shouldn't be getting in trouble for.
> --
> **Participant (Public):** There's a big fear of malpractice suits, which is unfortunate, because I think a lot of doctors do things to simply avoid malpractice. And that's an issue in our society that's not their fault.

However, because they also focus on punishment (for professionals who violate the *Caring Doctor* ideal), members of the public simultaneously see lawsuits as inevitable; they are necessary to address a professional's mistake and discourage future mistakes.

> **Participant (Public):** Can you sue them because now you are talking about potentially what? Needing medical care for the rest of your life. What's that going to cost you? And it's holding them accountable. They need to be accountable when they make a mistake like that.
> --
> **Participant (Public):** I think [the result of an adverse event] is definitely a lawsuit. I mean, you can't put your leg back on, you know? And the doctor should definitely have his license taken away.
> --
> **Participant (Public):** Well, try to get that taken care of, and then… Like my dad, he's trying to get compensated for his injuries, you know? That way we can take care of our everyday life.

With regard to malpractice, health care professionals generally saw malpractice suits as unhelpful for achieving patient safety. Following from the *To Err is Human* model, professionals believe that no amount of litigation is going to prevent adverse events. Caring doctors do their best, and punishing them with a lawsuit cannot remediate accidents that are a product of inevitable human error. Worse, when professionals use the *Authoritative Doctor* model, the threat of malpractice is seen as undermining

professionals' autonomy and limiting their ability to do their jobs. Instead, lawsuits create situations in which professionals are constantly second-guessing themselves, and they believe their treatment decisions are affected by this fear. It follows logically, then, that the threat of a malpractice suit makes patients *less* safe. If doctors are not free to care for patients in the ways they see fit, their patients will be worse off.

> **Participant (Health Care Professional):** Well, I think lawyers really, truly have to stop litigating for something and requesting money and huge settlements from physicians or hospitals for things that are—how should I say—they're not personal… Life sometimes, unfortunately, just happens. And you can't put people in a bubble. You can't put patients in a bubble. When they decide to litigate for millions of dollars because, you know, somehow or other, your mother got out of bed even though two side rails were up appropriately, and it was in the middle of the night, and it had normal staffing, and they have a broken hip or something like that. I think that just puts a fear into people so that the staff are focusing on the non-medical issues. They're focusing on "I can't get sued" or "I can't do this." Their focus is misplaced.

The Institution as a Collection of Individuals Cultural Model

When asked about responsibility for adverse events, health care professionals cast the net more broadly than the public, citing a wider range of actors, including professionals, administration risk management boards, and others. Professionals modeled the institution as, essentially, a collection of individuals collaborating on patient safety. According to this model, each individual person has a responsibility to speak up and pitch in. This way of thinking about institutions as no more than collections of individuals does not include—and may actually preclude—an understanding of institutions as *institutions,* as organizations with cultures and sets of norms and rules that shape behavior. Understanding institutions as the aggregate of individuals does not give professionals a way to think about the role of an organization in fostering environments that are conducive (or not conducive) to patient safety.

> **Participant (Health Care Professional):** Whoever actually sees the error should do something about it. So, if I made an error and it was caught by my nurse, my nurse should inform me so I can do something about it. Whoever made the error should fix it or get help fixing it, and whoever sees it should either help fix it or at least notify the people that can fix it to fix it. So basically, if you see something, say something.
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> **Participant (Health Care Professional):** I wouldn't want to blame any particular entity, because no one expects it to happen. No one will ever think that something like this could happen and they certainly don't want to see that happen. So, it needs to be looked at by everyone in this situation to see what you can do to prevent it from happening again.

Communications Implications

- **The *Institution as a Collection of Individuals* model obscures the key role that institutions play in causing adverse events and improving patient safety.** Seeing an institution as nothing more than the individuals that comprise it makes it difficult for health care professionals to understand the importance of institutional culture, norms, and rules. Communicators need to focus on and develop ways of explaining the role of institutions, as distinct from the specific parties who work within them.

The Government as Protector Cultural Model

While people's opinions are mixed on whether the government should provide health care and in what form, people strongly and unanimously believe that government must play a regulatory role in inspecting facilities and making laws to improve patient safety. This is consistent with findings from previous FrameWorks research; the public consistently assumes that the government can and should regulate industries to ensure people's health and safety.[14]

In applying this model to patient safety, participants drew analogies to other issues requiring regulation and inspection.

> **Participant (Public):** If you run a Burger King, the FDA [US Food & Drug Administration] comes in and checks on the Burger King. I'm sure there's some outside facilities coming in and checking on the hospital or private practice or whatever.
> --
> **Participant (Public):** The government is the head of all of us, you know? So, they should be watching all of us, making it better, making it safer, making life easier for us.
> --
> **Participant (Public):** I think we need to bridge the gap between government being able to enforce proper safety. Just like they would of a business, you know? The government or OSHA [US Occupational Safety and Health Administration] or these other outlets that we use to make sure employees are safe, customers are safe….

The *Government as Protector* model was also present in health care professionals' thinking, although it was weaker for professionals than for the public. Health care professionals sometimes suggested that the government has a responsibility to help institutions improve coordination and meet certain standards of care. For professionals, the *Authoritative Doctor* model was more powerful in shaping senses of responsibility and led to consistent resistance to interference in or oversight of care.

> **Researcher:** Would you say that the government has a role to play as far as keeping patients safe?

> **Participant (Health Care Professional):** Yeah, but just with basic rules and regulations.
>
> **Researcher:** What kinds of regulations?
>
> **Participant (Health Care Professional):** You know, very basic laws. If you are a doctor and you abandon care on a patient, then you can actually go to jail over it. So, stuff like that. Negligence laws, stuff like that.
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> --
> **Participant (Health Care Professional):** I think [government agencies] need to mandate transparency. I think they need to dedicate resources appropriately.

Communications Implications

- **The *Government as Protector* model should be leveraged and expanded.** This cultural model is potentially productive, but communicators should cue it with care. Past FrameWorks research on perceptions of government and health care shows that negative models of government are easy to cue and can quickly undermine support for government intervention. It is also important to note that while people believe that government has a role in patient safety, the details of that role are vague. Communicators must fill in people's thinking with specific details and examples about what the government can do and offer clear explanations about how this would improve patient safety.

Cognitive Hole: Culture

There is an important cognitive hole, in both the public's and health care professionals' thinking, with regard to the role of *culture* in health care and safety. A "cognitive hole" is a concept—in this case, the concept of organizational culture—that is prominent in expert thinking but not on the radar of the public or health care professionals.

People did not display awareness of how cultural norms affect patient safety. For example, while the public understands doctors as having a position of authority and trust, the public does not see how that power asymmetry can prevent people from speaking up. One acute blind spot among professionals was how institutional culture and power asymmetries—not only between doctors and patients but also across a staff—can undermine safety.

Communications Implications

- **The lack of thinking about the role of culture in patient safety presents a significant communications challenge.** For the public and health care professionals to understand and

support many of the solutions for which experts advocate, they will need a way of seeing what culture is and understanding how it affects patient safety. Developing strategies for bringing culture into view and explaining its importance in shaping and improving patient safety is a vital task for future research.

Mapping the Gaps and Overlaps in Understanding

This section of the report maps the gaps and overlaps between the expert perspective and public and professional perspectives and reveals key communications challenges and opportunities.

Overlaps in Thinking

There are important points of overlap between experts' understandings of patient safety and the public's and health care professionals' understandings. As expected, there are more overlaps between experts and health care professionals than between experts and members of the general public. These overlaps represent the common ground that patient safety communicators can build on to advance key ideas about patient safety and increase support for important policies and practices.

Experts, the public, and health care professionals all understand that:

- **Adverse events are caused in part by cognitive overload.** Mistakes are more likely to happen if health care professionals are stressed or overworked.

- **Government has a responsibility** to make sure that health care is safe and standardized.

- While not solely responsible for safety, **patients have a role to play in their health care** and patient involvement can help produce better outcomes. (While all groups agree that patients have some responsibility for safety, they differ in how they understand this role.)

Experts and the public share the understanding that:

- **Managers and administrators of health care facilities** are responsible for patient safety.

Experts and health care professionals both understand that:

- **Adverse events vary by type and degree,** and errors can happen at any given moment.

- **Health care fragmentation and problems with information sharing** are a source of medical error.

- **Systems need improvement** in order to be effective in keeping patients safe.

Communicators can build on these overlaps to connect with audiences and move thinking in new directions. They are good starting points for communicating about patient safety.

Gaps

In addition to overlaps, researchers found significant gaps between expert and public understandings of patient safety and between experts and health care professionals. Reframing strategies can help address these gaps and, in so doing, shift and expand the discussion on patient safety. Future communications research will develop and test specific frames (e.g., values, metaphors, explanatory tools, etc.) to address and close these gaps.

The following describe the gaps between experts and *both* the public and health care professionals. In these areas, the public's and health care professionals' thinking differs in important ways from experts' thinking.

1. ***Prevalence: High vs. extremely rare.*** Experts know that, despite recent improvements, health care remains unsafe, and adverse events are prevalent. Both the public and health care professionals, by contrast, believe that adverse events are rare and that patients are generally safe.

2. ***Human error: Manageable vs. inevitable.*** While experts recognize that people are prone to mistakes, they see human error as a problem that can be effectively managed with systems; in other words, strong systems can prevent many errors and improve patient safety. The public sees error as an immutable aspect of human nature that is not affected by intervention. Health care professionals believe that human error is currently managed as well as possible and that adverse events that occur can't be prevented. This belief—that error is inevitable and part of human nature—is a foundational challenge for communicators.

3. ***Doctors: Part of the solution vs. the key to safety.*** Experts understand that doctors and other health care professionals are central to patient safety, but they focus on redesigning systems and changing organizational culture as the keys to improving it. The public, on the other hand, sees doctors as the key to safety and believes that *caring* doctors can ensure it. Health care professionals, meanwhile, believe that authoritative, knowledgeable doctors are safe doctors. Both the public and health care professionals, in other words, place much more emphasis on the role of caring and competent professionals, viewing them as the main determinant of patient safety.

4. ***Medical culture: Important priority vs. not on the radar.*** Experts emphasize that medical culture needs to change to prioritize safety and transparency. They understand that cultural norms can make it difficult for even the best-intentioned professionals to call out errors or unsafe behavior,

or own up to mistakes when they happen. Health care professionals, on the other hand, recognize that it can be difficult to challenge authority, but they do not think about these challenges in terms of culture or see culture change as an important solution. Culture is simply off their radar.

5. ***Prevention of adverse events: Achievable vs. impossible.*** In terms of experts' and the public's feelings of efficacy—or their assumptions about whether change is possible—experts see the prevention of adverse events as eminently achievable with the right changes to systems, culture, and policy. The public is much more fatalistic. Due to assumptions about human error and the impersonal nature of systems, members of the public do not think that much can be done to reduce or prevent adverse events. Health care professionals also believe that prevention of error is unlikely, but for a different set of reasons: they believe that the people who work in health care facilities are doing everything they can to keep patients safe, and that *little more can be done*.

The following are specific gaps between experts and the public:

1. ***Patient safety: An important health care issue vs. not on the radar.*** For experts, patient safety is a prominent component of health care quality, and an issue that affects every American. Though the public is aware of many of the things that can go wrong in health care, "patient safety" is not a concept that they naturally use or readily access. They are not attuned to the importance of measuring or evaluating patient safety in a formal way or demanding that their health care be safe.

2. ***The role of patients: Partners vs. consumers.*** Experts believe that it is important for patients to be empowered as full partners in their own care; they should be able to ask questions of their health care professionals, have full access to all of their health information, and be involved in treatment decisions. The public understands the patient role in a more limited way, through a consumerist lens; rather than asking questions that might challenge doctors' authority, the public see patients' role as choosing wisely among professionals and facilities and insisting on a good consumer experience (e.g., short wait times, etc.).

3. ***The importance of systems: High vs. low.*** Experts understand systems as crucial for improving patient safety and see systems of many types as important, including care protocols, documentation protocols, institutional culture, and government. The public, however, views systems largely as a *threat* to safety, because they see systems the enemy of quality care, which is defined in terms of personalization and caring. Members of the public think people get lost in systems; they are less safe, not more, in systems.

The following are specific gaps between experts and health care professionals:

1. ***The role of patients: Partnership vs. compliance.*** Experts believe that patients are important partners in their own care. Health care professionals do not view patients as true partners. They see patients' role as adhering to health care professionals' instructions—not engaging in a dialogue or asking questions.

2. ***Systems: Key to safety vs. challenge to authority.*** While experts and health care professionals both recognize that systems and protocols can help mitigate cognitive overload, experts understand that systems have many other functions that improve patient safety. Health care professionals, however, tend to think about systems as imposing arbitrary dictates that challenge their authority as skilled professionals; they believe that they know how to best treat their patients and see systems as burdens that prevent them from providing quality care.

Conclusion: Initial Recommendations and Tasks for Future Research

Communicators face important challenges in encouraging broad public and professional support for the policies and initiatives necessary to improve patient safety. These challenges follow from people's thinking about the possibility of prevention and the role of human error and standard systems in what people tend to see as a wholly personal doctor-patient relationship. The overarching challenge is this: the public and health care professionals understand human care as crucial to quality health care, but they also see humans as inevitably disposed to error. Overcoming this challenge requires reframing research; however, communicators can implement the following initial recommendations now.

Recommendation #1: Change what quality is "about."

Members of the public clearly do not think about "safety" when thinking about "quality" health care. Rather, they see health care through the lens of *Consumerism,* meaning that an individual must always seek out *more* and *better* care. In this way of thinking, "better" care does not bring to mind thoughts about safety. In the public's thinking, "quality" typically means comfortable and convenient health care. Health care professionals also tend to ignore safety when thinking about quality, largely because they see safety as a baseline assumption in their everyday work and not as something to think about explicitly. To change these patterns of thinking, communicators should:

- **Avoid using the term "consumer" to describe patients.** In the health care field, the term "consumer" has become common,[15] even though it is not widely used by members of the public. Nevertheless, this word likely backfires because it cues associations like comfort and convenience

and, at the same time, obscures safety. In other words, safety is not understood as a feature that a "consumer" would seek out. Communicators should instead refer to "patients" (as in "patient" safety) or consider developing and testing other terminology.

- **Take every opportunity to cue the idea of safety.** Often, communicators speak about "quality" when they really mean safety. Safety is a key aspect of quality health care, perhaps the most important. But the public, and health care professionals, do not share understandings of the word "quality." Therefore, communicators should repeatedly cue safety when talking about quality; doing so will create an association between safety and quality and make safety more salient in public and professional thinking.

- **Continue to promote tools like report cards.** The patient safety field has, of course, taken action to inform the public about patient safety through ratings, report cards, and other resources.[16] Yet these resources are not as recognizable or expected as safety ratings in other sectors, such as food safety rankings placed in restaurant windows. Communicators should continue to disseminate these ratings widely so that the public expects them and knows where to find them—and doesn't have to seek them out.

Recommendation #2: Cue and expand productive models, and mute unproductive ones.

Understanding how people think helps communicators craft more effective messages. To do so, communicators should:

- Avoid cuing the concept of "caring." The *Caring Doctor* cultural model is a significant challenge for communicators, and is highlighted below as a task for future research. Communicators can begin to address this challenge now by side-stepping discussions about "caring" (or "uncaring") health care professionals. A statement like "Even the best doctors make mistakes" can backfire because: (1) it communicates that the best doctors are unlikely to make mistakes (though they can); (2) the public will likely interpret "best" as "caring;" and (3) it reinforces the idea that human error is inevitable. Instead, communicators should focus on the broader contexts in which health care professionals work, rather than the professionals themselves.

- Leverage the *Attention Overload* model. The *Attention Overload* model helps people think about the outside factors that contribute to adverse events, such as inadequate staffing and overwork. Communicators can cue this thinking to open a conversation on patient safety, but they should then expand on it by explaining that there are also *other* systemic factors that drive up rates of adverse events.

- Avoid cuing the *Faceless Systems* model to help people see systems as solutions. Communicators must not frame systems as vast and abstract, even when explaining how they should be improved or managed. Communicators should consider preparing short go-to examples that cast systems as important tools for reaching patient safety goals.

Recommendation #3: Focus on explanation.

- **Use explanatory tools—like explanatory chains (clear, step-by-step explanations of cause and effect) or examples—to help the public understand patient safety.** Communicators should clearly explain that patient safety is a problem that can be solved through systems change (including culture change). While developing effective explanatory tools should be a primary focus of future research, communicators can begin reframing now by using *explanatory chains* that clearly link systems to safety. An explanatory chain is a brief and clear explanation of the causes and consequences of a problem, including the mechanism by which the problem is created. By making elements of the expert perspective more accessible, explanatory chains can empower people to think through an issue and address it more productively. To create an effective explanatory chain, communicators should include the following components:

    - **Initial Factor:** What is the original cause of the problem? Effective explanatory chains provide appropriate background information on the initial challenge.

    - **Mediating Factors***:* What does the initial factor cause? The mediating factors link the initial factor to the final consequence through explanation. This helps people see that circumstances are not inevitable—that problems have causes and consequences.

    - **Final Consequence:** What are the effects? The final consequence is the effect, result, or impact.

    - **Solutions:** What can we do? An effective explanatory chain sets up communications about solutions.

- **Counter fatalism with descriptions of effective solutions.** This research finds that people don't think that improvement is possible. Communicators can help people overcome this fatalistic attitude by reinforcing the idea that positive change *is* possible and realistic. They can do so by explaining how policies, initiatives, and other solutions lead to better outcomes. In general, solutions messages must:

    - *Match the scope of the problem.* The sense of the problem must not outweigh the proposed solutions. A problem that seems inadequately addressed by a given solution will further entrench fatalistic thinking.

- *Provide a sense of efficacy.* Demonstrate that an issue can be fixed and show how systems are able to fix these issues.

- *Include sufficient explanation.* Show exactly how the solution was achieved and *how* it positively affects outcomes.

- *Use even-handed tones.* Crisis tones will likely make people more fatalistic about improving patient safety because the problem will appear too overwhelming to fix.

- **Use "social math" to explain prevalence.** Neither members of the public nor health care professionals, in various ways and for various reasons, are able to accurately conceptualize the severity of the problem of patient safety. Social math—explaining statistics by comparing an amount that is "difficult to think" to an amount that is "easy to think"—is a useful tool. For example, communicators might talk about prominence by saying something like, "1,000 people will die today due to preventable hospital errors."[17] Though clearly stated, people might not know how to contextualize the number mentioned and assess the severity of the situation. Communicators could use social math to, for example, compare this large number to another statistic (e.g., how many people will die today due to a particularly severe but rare medical condition) to help them better understand the scope of the problem.

Tasks for Future Research

Communicators can adopt the above recommendations now to reframe their messages, but effectively reframing patient safety will require the development of a suite of communications tools and strategies that can fully bridge the gaps between experts and the public and health care professionals. Testing those strategies will demonstrate which are most effective, and why—as well as which might not work well.

The major challenges in communicating with the public overlap significantly with challenges in communicating with professionals, so we suspect that many of the tools will be effective with both groups. The following tasks comprise a prospective "to-do" list for future framing research:

Task #1: Put patient safety on the public's radar.

The public does not think of "patient safety" as a concept, a field, a goal, or a type of expertise. This lack of understanding makes it difficult for communicators to increase salience and build public support for initiatives to improve patient safety. We must develop and test ways of talking about patient safety that help the public understand it as a salient issue that must be addressed. Framing strategies might include new names for patient safety and examples of adverse events and near misses that help people understand what patient safety is and how it works. Communicators can begin doing this work now, but an empirical approach will help identify which strategies, deployed in which ways, are most effective.

Task #2: Expand the concept of health care "quality" to include "safety."

When the public and health care professionals think about health care "quality," they rarely think about safety. The public thinks with a consumerist model of health care, in which "quality" means comfort and convenience and can be judged based on online reviews by other patients. Health care professionals also see patients as consumers and aim for patient satisfaction in their care, but they consider safety to be a baseline standard rather than an aspect of quality. Reframing the idea of "quality" health care so that it includes patient safety is a key task in creating more effective communications about patient safety.

Task #3: Help people understand the prevalence of adverse events.

Both the public and health care professionals underestimate the prevalence of adverse events. However, correcting these misperceptions is not as simple as providing people with the accurate statistics. FrameWorks research has repeatedly found that people interpret unframed facts and statistics in unintended ways.[18] Worse yet, direct attempts to correct misperceptions have been found to reinforce them in what is called a "backfire effect." In addition to social math, research is needed to identify ways of framing prevalence that help the public and professionals better understand the scope of the problem.

Task #4: Make systems a part of the human story of health care.

The public and health care professionals believe that good care is *human* care, performed by professionals with talents and faults. The systems that are—or should be—in place tend to be either invisible or seen as overwhelming or threatening. This is an important framing challenge. Communicators need framing strategies that can help people see systems as a critical part of the solution to patient safety issues. For example, explanatory metaphors could potentially help people understand how human beings, technology, culture, protocols, and other elements can be integrated within effective systems that ensure patient safety.

Task #5: Explain how human error can be managed.

The public and health care professionals believe that human beings' fallibility makes errors inevitable. Unless people come to understand how human error can be managed, they will continue to be fatalistic and assume that little can be done to improve patient safety. Framing strategies—for example, metaphors and exemplars—can help show how human error can be managed effectively through systems design.

Task #6: Shift understandings of the patient role in care.

Communicating about the role that patients have in improving safety can be difficult. Communicators don't want to place too much responsibility on the patient, but they also want to encourage patients to ask questions and take other actions that can improve safety and create environments in which patients are empowered to participate in their own care. Reframing strategies are needed to shift both the public's and health care professionals' understandings of the relationship between health care professionals and patients and move thinking in a more egalitarian direction.

Task #7: Explain the role of institutional culture.

Neither the public nor health care professionals fully recognize the importance of institutional culture as a contributor to adverse events. Increasing understanding of this role is an important task in communicating with both groups, but particularly with health care professionals, as doing so could change their orientation toward aspects of their own institutions and practice.

Task #8: Expand people's thinking about solutions.

Communicators must help the public and health care professionals understand the myriad solutions that could improve patient safety. Neither the public nor health care professionals can clearly and consistently conceptualize a role for policy solutions in particular. This is likely due to the intense focus on the individuals—the health care professionals and patients—involved in health care. Strategies for talking about these solutions must be developed and tested.

Task #9: Counter fatalism.

Communicators need strategies to combat the fatalism that results from many of the public's and health care professionals' default ways of thinking. Fatalism undermines support for proposed solutions by leading people to conclude that proposed measures won't make much difference. To generate support for the solutions that experts recommend, communicators will need framing strategies that can engender a sense of efficacy.

Addressing these tasks will enable us to develop a reframing strategy that can deepen understanding of public safety, increase its salience, and build support for the solutions that experts recommend. This strategy will have the empirical power to change the conversation around patient safety—and ultimately change how our society thinks about and acts on it.

Appendix

Expert Interviews

To explore experts' knowledge about the core principles of patient safety, FrameWorks conducted 12 one-on-one, one-hour phone interviews with participants whose expertise was based in one of five general categories: academic research, leadership, systems/metrics, patient experience, and policy. Interviews were conducted from October to November of 2016 and, with participants' permission, were recorded and transcribed for analysis. FrameWorks compiled the list of interviewees, who reflected a diversity of perspectives and areas of expertise, in collaboration with the Betsy Lehman Center.

Expert interviews consisted of a series of probing questions designed to capture expert understandings about what patient safety is, what causes patient harm, who is responsible for patient safety, and what needs to happen for patient safety to improve. In each conversation, the researcher launched a series of prompts and hypothetical scenarios designed to challenge experts to explain their research, experience, and perspectives; break down complicated relationships; and simplify complex concepts. Interviews were semi-structured in the sense that, in addition to pre-set questions, researchers repeatedly asked for elaboration and clarification and encouraged experts to expand upon concepts they identified as particularly important.

Analysis employed a basic grounded theory approach.[19] Researchers pulled common themes from each interview and categorized them. They also incorporated negative cases into the overall findings within each category. This procedure resulted in a refined set of themes, which researchers also supplemented with a review of materials from relevant literature. FrameWorks revised a draft of the expert story in response to a feedback session conducted with experts in January 2017.

Cultural Models Interviews

The cultural models findings presented in this report are based on two sets of interviews—one with members of the public and another with health care professionals. To understand the public's thinking, FrameWorks conducted 20 in-person, in-depth interviews with members of the public in February 2017 in four locations: Springfield, MA; Boston, MA; Atlanta, GA; and Sacramento, CA. In addition, researchers conducted 10 in-depth interviews with health care professionals in April 2017 by Skype or phone (if the interviewee was unable to use Skype).

Cultural models interviews—one-on-one, semi-structured interviews lasting approximately two hours—allow researchers to capture the broad sets of assumptions, or "cultural models," that participants use to make sense of a concept or topic area. These interviews are designed to elicit ways of thinking and talking about issues—in this case, issues related to patient safety. Interviews covered thinking about health care quality generally before turning to a discussion of things that could go wrong in health care. The

interviews touched on prevalence, causes, and effects; responsibility for the problem; and solutions to it. The goal of these interviews was to examine the cultural models that participants use to make sense of these issues, so researchers gave them the freedom to follow topics in the directions they deemed relevant. Researchers approached each interview with a set of topics to cover but left the order in which these topics were addressed largely to participants. All interviews were recorded and transcribed with participants' written consent.

Including a wide range of people allowed researchers to identify cultural models that represent shared patterns of thinking among members of the public. These participants were recruited by a professional marketing firm and were selected to represent variation along the domains of ethnicity, gender, age, residential location, educational background (as a proxy for socioeconomic status), political views (as self-reported during the screening process), religious involvement, and family situation (married, single, with children, without children, age of children). The sample included 13 women and seven men. Of the 20 participants, nine self-identified as "white" or "Caucasian," four as "Black" or "African American," four as "Hispanic," and three as another race or ethnicity. Four participants described their political views as "liberal," four as "conservative," and 11 as "middle of the road." The mean age of the sample was 44 years old, with an age range of 26 to 60. Education was used as a proxy for socioeconomic status; six participants had finished high school, six had completed some college, four had graduated from college, and four had graduate degrees. Twelve were married, and 11 were parents of at least one child.

Participants for the sample of health care professionals were recruited by drawing upon professional networks tapped by the Betsy Lehman Center as well as FrameWorks. To complete the sample, additional participants were recruited by the same professional marketing firm that recruited the members of the public. Participants represented diverse specialties in ambulatory and hospital settings, including medicine (specialty, primary care), nursing (emergency, non-emergency), surgery, anesthesiology, and administration (nursing, clinic/practice).

To analyze the interviews, researchers used analytical techniques from cognitive and linguistic anthropology to examine how participants understood issues related to patient safety.[20] First, researchers identified common ways of talking across the sample to reveal assumptions, relationships, logical steps, and connections that were commonly made, but taken for granted, throughout an individual's talk and across the set of interviews. In short, the analysis involved patterns discerned from both what was said (how things were related, explained, and understood) and what was not said (assumptions and implied relationships). In many cases, analysis revealed conflicting models that people brought to bear on the same issue. In such cases, one of the conflicting ways of understanding was typically found to be dominant over the other, in the sense that it more consistently and deeply shaped participants' thinking.

Analysis centered on ways of understanding that were shared across participants. Cultural models research is designed to identify common ways of thinking that can be identified across a sample. It is not

designed to identify differences in the understandings of various demographic, ideological, or regional groups (which would be an inappropriate use of this method and its sampling frame).

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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Endnotes

[1] Kohn, K.T., Corrigan, J.M., & Donaldson, M.S. (1999). *To err is human: Building a safer health system.* Washington, DC: National Academy Press.

[2] Throughout this report, we use the term "health care professional" to refer to anyone in the position of providing or managing care (e.g., physicians, nurses, administrators).

[3] On cultural models, see Quinn, N., & Holland, D. (1987). Culture and cognition. In D. Holland & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 3–40). Cambridge, United Kingdom: Cambridge University Press.

[4] This point further supports the focus on the goal of "patient safety" more broadly, rather than "errors" or "harm" which many experts took to refer to errors of commission.

[5] Makary, M. A., & Daniel, M. (2016). Medical error-the third leading cause of death in the US. *BMJ: British Medical Journal (Online)*, *353*.

[6] See, for example: Lindland, E., Fond, M., Haydon, A., & Kendall-Taylor, N. (2015). *Gauging aging: Mapping the gaps between expert and public understandings of aging in America.* Washington, DC: FrameWorks Institute; Lindland, E., Fond, M., Haydon, A., & Kendall-Taylor, N. (2015). *"Nature doesn't pay my bills:" Mapping the gaps between expert and public understandings of urban nature and health.* Washington, DC: FrameWorks Institute; O'Neil, M., Sweetland, J., & Fond, M. (2017). *Unlocking the door to new thinking: Frames for advancing oral health reform.* Washington, DC: FrameWorks Institute.

[7] All participant interview excerpts have been edited to remove any personally identifying information and improve readability. To conduct the analysis, researchers worked from verbatim transcripts of the interviews.

[8] We use the term "doctor" here because members of the public thinks of a "doctor" as a prototypical health care professional. However, it was clear in participants' talk that the cultural model of the *Caring Doctor* generally applies to any health care professional providing care.

[9] See the FrameWorks Institute's Education Core Story background work on the *Caring Teacher* cultural model: http://frameworksinstitute.org/k-12-education.html

[10] See O'Neil, M., Sweetland, J., & Fond, M. (2017). *Unlocking the door to new thinking: Frames for advancing oral health reform.* Washington, DC: FrameWorks Institute.

[11] The doctor-patient interactional dynamic has been studied through the lenses of many social science and humanities disciplines, and this relationship is evidenced in the interviews conducted for this research. See, for examples of sociolinguistic analyses of doctor-patient dynamics: Ainsworth-Vaughn, N. (1998). *Claiming power in doctor-patient talk.* Oxford: Oxford University Press; Mishler, E. G. (1984). *The discourse of medicine: Dialectics of medical interviews* (Vol. 3). Greenwood Publishing Group.

[12] See the foundational IOM report of the same name: Kohn, K.T., Corrigan, J.M., & Donaldson, M.S. (1999). *To err is human: Building a safer health system.* Washington, DC: National Academy Press.

[13] For more information about how public health professionals understand integration of systems, see: Fond, M., Volmert, A., & Kendall-Taylor, N. (2015). *Making public health informatics visible: Communicating an emerging field.* Washington, DC: FrameWorks Institute.

[14] See, e.g., FrameWorks research on environmental health: Lindland, E., & Kendall-Taylor, N. (2011). *People, polar bears, and the potato salad: Mapping the gaps between expert and public understandings of environmental health.* Washington, DC: FrameWorks Institute.

[15] Similar patterns can be observed in other domains of wellbeing, like housing: Baran, M., Kendall-Taylor, N., Morgan, P., Haydon, A., & Volmert, A. (2016). *"A house, a tent, a box": Mapping the gaps between expert and public understandings of healthy housing.* Washington, DC: FrameWorks Institute.

[16] Work done by The Leapfrog Group (http://www.leapfroggroup.org/) offers a clear example.

[17] At the time of this writing, this fact is published on the homepage of The Leapfrog Group website (http://www.leapfroggroup.org/).

[18] See, e.g., Volmert, A., Fond, M., Haydon, A., O'Neil, M., & Gerstein Pineau, M. (2016). *"It's a rite of passage": Mapping the gaps between expert, practitioner, and public understandings of adolescent substance use.* Washington, DC: FrameWorks Institute.

[19] See Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine; Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

[20] See Quinn, N. (Ed.). (2005). *Finding culture in talk: A collection of methods*. New York, NY: Palgrave Macmillan.