



# BETSY LEHMAN CENTER

for Patient Safety

## The Financial and Human Cost of Medical Error

... and How Massachusetts Can Lead the Way on **Patient Safety**

JUNE 2019

EXECUTIVE SUMMARY

### Research Question

#### WHAT IS THE FINANCIAL AND HUMAN COST OF MEDICAL ERROR IN MASSACHUSETTS?

In keeping with our statutory mandate to support and report on safety improvement across the state, the Betsy Lehman Center conducted two new studies that help fill gaps in our knowledge about the incidence and impacts of preventable patient harm in Massachusetts.

- One analyzed claims data to measure the numbers and types of medical errors and estimate the excess health insurance costs associated with the harm caused by errors during a single year.
- The second started with a 5,000-household phone survey that identified 988 people with a medical error experience. A subsequent re-contact survey explored the physical, emotional, behavioral, and financial impacts of those medical errors, as well as whether open communication by providers about the error mitigated impacts.



*That medical error decreased the length of time that I had with my dad. That definitely took away some of his will to live. He had lost his hope. He lost his will to live.*

**There has been considerable progress on improving the safety of health care for patients over the past two decades. Much of this work has been done by hospitals, both across the country and in Massachusetts, where they rank highly on quality and safety.**

Yet preventable deaths and injuries associated with medical error persist. And, as more complex care is delivered outside of hospitals, risks to patient safety are an emerging concern in physician and dentists' offices, surgery centers, pharmacies, dialysis centers, patients' homes, nursing homes—anywhere patients receive care. Systems for keeping patients safe have not always kept up with the increasing complexity of health care delivery.

The challenges are great, but so are the opportunities for improvement—particularly in Massachusetts. The Center's report, *The Financial and Human Cost of Medical Error ... and How Massachusetts Can Lead the Way on Patient Safety*, details two sets of research findings and also proposes a coordinated response through which the Commonwealth's providers, policymakers, and public can accelerate safety and quality improvement and lead the nation on this urgent health care challenge.

#### IN BRIEF: MASSACHUSETTS FACES THE SAME PATIENT SAFETY CHALLENGES THAT PERSIST THROUGHOUT THE NATION

- Our research identified almost **62,000 preventable harm events** and more than **\$617 million in excess health care insurance claims**—just exceeding **one percent of the state's Total Health Care Expenditures for 2017**. Because some of the most common types of errors, such as medication and diagnostic error, cannot be reliably identified through health insurance claims data, these numbers substantially underestimate both total incidence and cost.
- From our surveys of Massachusetts residents, we learned that medical errors happen to people in all age groups, income brackets, and regions of the state. In the aftermath, many suffer **long-lasting physical, emotional, behavioral and financial impacts**. Individuals report loss of trust in the health system and some avoid not only the clinicians and facilities involved in the error, but health care entirely.
- Two-thirds expressed dissatisfaction with how their health care providers communicated with them after the errors, but an important and promising finding is that **in instances where providers exhibited greater open communication, patients report less emotional harm and health care avoidance**.

All quotations are from medical error survey respondents, used with permission.



READ THE FULL REPORT:

[BetsyLehmanCenterMA.gov/MedicalErrorCosts](https://BetsyLehmanCenterMA.gov/MedicalErrorCosts)

**FINDING: MEDICAL ERRORS ARE FREQUENT, HARMFUL, AND COSTLY**

Using one year of claims from the state’s All-Payer Claims Database (APCD) and Medicare data, we identified 42,927 preventable harm events in settings that provide services covered by health insurance, primarily hospitals, ambulatory surgery centers, medical offices, and nursing homes. For the year following each error, we calculated a total of \$518 million in additional health insurance costs for these patients when compared with similar patients who did not experience the error. For several other prevalent preventable harm events not accounted for in this analysis—falls, medication errors, MRSA and *C. difficile* infections—we were able to partially supplement the claims data figures with available hospital inpatient data and incident reports. This added 19,055 incidents and \$99 million in excess costs to our calculations.

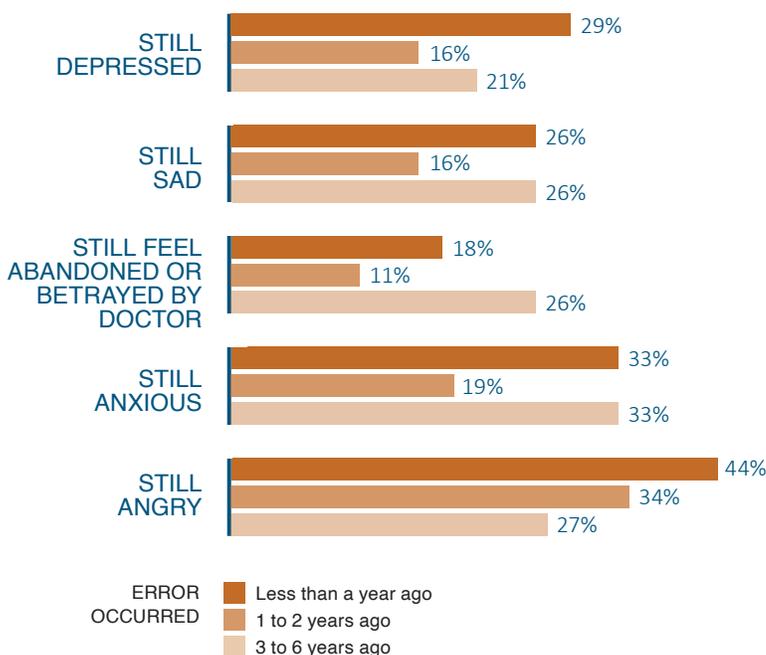
Our conservative approach, combined with the inherent limitations of claims data analysis, underestimates the incidence and financial cost of medical error in the Commonwealth. Because claims data only reveal what a patient was treated for—not the underlying reasons for the treatment or whether the treatment was correct—several leading causes of preventable harm (e.g., most diagnostic and medication errors) are not included in our findings.

**FINDING: MEDICAL ERRORS ARE ASSOCIATED WITH FINANCIAL IMPACTS AND LONG-LASTING PHYSICAL AND EMOTIONAL HARM**

To better understand how medical error affects patients and their families, we reached 253 respondents from the original 5,000-household random-sample survey with a medical error experience for further in-depth interviews.

Nearly half reported two or more financial impacts from the errors (49%), including increased health care expenses and loss of work. Respondents also reported a range of emotional impacts that did not subside over time.

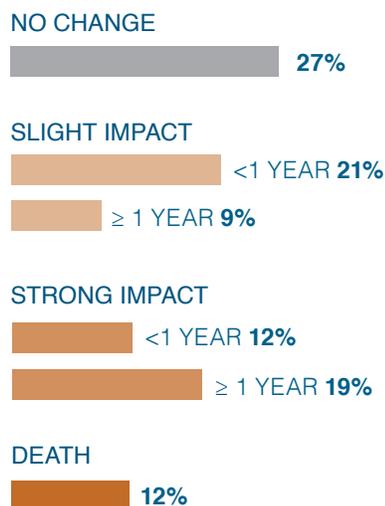
**MEDICAL ERRORS HAVE LONG-LASTING IMPACTS ON EMOTIONAL HEALTH**



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*We felt less confident in the professional health care and felt more burdened by the need to be our own advocate and watchdog.*

“  
*I stay away from medical [care]. I stay away from it as much as possible. I use alternative resources; try and go holistic.*

**MEDICAL ERRORS HAVE LONG-LASTING IMPACTS ON PHYSICAL HEALTH**



**FINDING: MEDICAL ERRORS ARE ASSOCIATED WITH LONG-LASTING LOSS OF TRUST AND AVOIDANCE OF HEALTH CARE**

Two-thirds of respondents expressed reduced levels of trust in health care no matter how long ago the error occurred. Well over half of people whose error happened 3-6 years ago said that they sometimes or always continue to avoid the individual doctors (57%) or the health care facility (57%) involved in the error. Of great concern is that more than one-third of all respondents report that they continue to sometimes or always avoid all medical care.

**FINDING: PATIENTS AND FAMILIES RARELY RECEIVE AN APOLOGY OR OFFER OF SUPPORT FOLLOWING AN ERROR**

Despite a Massachusetts law that requires providers to disclose medical errors that cause significant harm and encourages apology, fewer than one in five (19%) say that they received an apology after the medical error. Only one quarter (25%) were offered one or more types of emotional, functional or financial support services; the most common additional help offered was spiritual support.

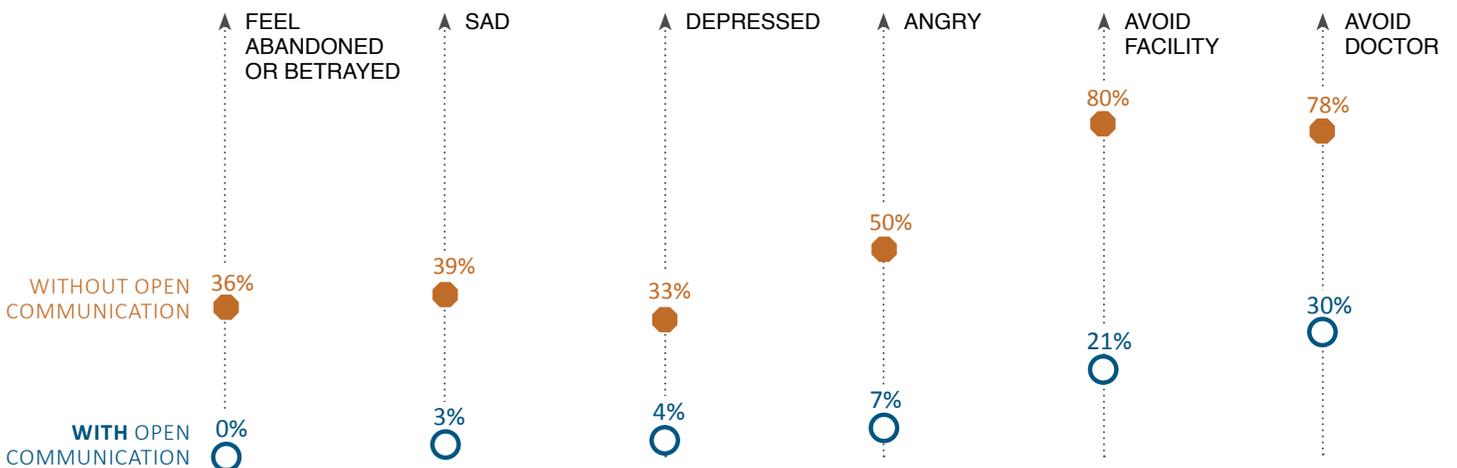
**FINDING: MOST PEOPLE ARE DISSATISFIED WITH THE COMMUNICATION FROM PROVIDERS AFTER AN ERROR, BUT OPEN COMMUNICATION IS LINKED TO LOWER LEVELS OF ADVERSE EMOTIONAL IMPACTS AND HEALTH CARE AVOIDANCE**

More than sixty percent of respondents were dissatisfied with the communication from their provider after the error. But when providers exhibit greater open communication about the error, patients report lower levels of emotional harm, as shown below. Open communication has a similar effect on reducing health care avoidance, from 45 percent (without open communication) to 26 percent (with open communication).

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*I know she was sick and I know she wasn't going to live another 10 years. A little bit of reasonable follow-through would've prevented so much, and that was the hardest part.*

”  
*The hardest part was having to go back and have a procedure done again. There were a lot of problems, and it was quite painful.*

**OPEN COMMUNICATION FROM PROVIDERS IS LINKED TO LOWER LEVELS OF HARM**



## FINDING: PATIENTS AND FAMILIES ARE ASTUTE OBSERVERS OF WHAT, WHERE, AND WHY THINGS WENT WRONG ... BUT OFTEN DO NOT SPEAK UP

When answering a series of open-ended questions about the errors they had experienced, the 253 re-contact survey respondents described what happened and their perceptions of the underlying causes of those events.

Several major themes emerged. Although there were many cases of severe injury in the course of intensive treatment, respondents often described preventable injuries that happened during routine care. Many of their injuries resulted not from a singular error, but from a series of cascading events combined with missed opportunities to prevent harm.

Respondents perceived the underlying causes of the errors to range from breakdowns in systems, teamwork, and communications, to workforce factors. They often expressed empathy for the clinicians and staff involved in the errors, noting that they seemed stressed, harried, burnt out or otherwise unable to do their jobs well under current constraints.

Nearly 40 percent of respondents didn't discuss the error with anyone other than family and friends, primarily because they believed it "would not do any good." Of those who did, almost two-thirds (62%) said they hoped to prevent harm to future patients by speaking up. Lawyers were consulted just seven percent of the time, while errors were reported to government agencies only one percent of the time.

”  
*And he even came in  
and apologized to me.  
And I've never had a  
doctor do that.*

## HOW MASSACHUSETTS CAN LEAD THE WAY ON PATIENT SAFETY

The findings from these two studies demonstrate an urgent need for policymakers and providers to prioritize safety and act to accelerate progress in reducing preventable patient harm in all health care settings throughout the Commonwealth.

Meaningful progress on patient safety will require a coordinated, sustained, multi-stakeholder effort with a wide range of stakeholders and experts assuming leadership and responsibility where they are best situated to contribute. Policymakers and state agencies—with public engagement—can help create favorable conditions for improvement. But real change will take leadership from within the provider community.

To create a forum where this work can take place, the Betsy Lehman Center is convening a Massachusetts Health Care Safety and Quality Consortium. This body will manage a process through which providers,

payers, patient safety organizations, researchers, policymakers and patients will develop a "Roadmap to Safety and Quality" for the state—a framework that establishes a vision and goals for improving safety in all health care settings in the Commonwealth and identifies and prioritizes key challenges and opportunities. The Consortium will next identify actionable, measureable steps and coordinate a series of initiatives under four pillars or essential elements of patient safety:

- TRANSPARENCY
- CULTURE
- LEARNING HEALTH SYSTEMS
- SUPPORT FOR PATIENTS AND PROVIDERS

The Consortium's members include Massachusetts health care provider associations and professional societies, health plans, patients, research and advocacy groups, and state health care agencies.

Opportunities to achieve measurable impact are within reach, and now is the time to scale proven strategies to accelerate safety improvement across the state. It will take long-term commitment and focus to ensure that the principles of safety culture and high reliability are woven into the fabric of health care delivery in every setting—from hospitals to medical offices to nursing homes to urgent care centers and more.

Massachusetts faces the same challenges as other states when it comes to patient safety, yet our leadership on medical research and innovation and our achievements in the health policy arena makes us unique. This know-how, combined with our history of collaboration on other pressing health care challenges, positions Massachusetts to be a model for the nation on patient safety too.