

**Testimony of
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**U.S. Senate Committee on Health, Education, Labor and Pensions
Subcommittee on Primary Health and Aging**

Chairman Sanders, Ranking Member Burr, and Distinguished Members of the Subcommittee:

Thank you for inviting me to testify today. My name is Ashish Jha, and I am a professor at the Harvard School of Public Health in the Department of Health Policy and Management. I am also a practicing general internist at the VA Boston Healthcare System. My research focuses on quality and safety of medical care, and it is for that reason that I am here today.

Progress in patient safety, but a long way to go

It has been 15 years since the landmark report by the Institute of Medicine (IOM), *To Err is Human*, which found that as many as 100,000 people die every year in the United States as a result of preventable medical errors. IOM estimated that medical errors have a total annual cost of between \$17 billion and \$29 billion in additional care, lost income, and disability.¹ As a physician, I took the oath to “first, do no harm” and yet, *To Err is Human* revealed to me and to doctors, nurses, and patients a simple truth: we do a staggering amount of harm every day. So here we are, 15 years after *To Err is Human* and it is critical to ask a simple question: how much progress have we made?

First, I want to start off with some good news. We have dramatically increased our awareness of patient safety issues and changed how we think about medical errors. In the past, medical errors were thought to be the result of individuals behaving badly. We blamed the doctor who ordered the wrong treatment, the pharmacist who dispensed the wrong dose, or the nurse who gave the medication to the wrong patient. This idea that adverse events were due to bad people led to a “deny and defend” culture among healthcare professionals and prevented progress on patient safety.

Today, we know better. We know that medical errors are largely the result of bad systems of care delivery, not individual providers. When a physician orders the wrong medication because two drugs might sound alike or when a patient develops a central line infection because a rushed surgeon didn’t use proper sterile technique, we now understand that we need to focus on the system that produced the errors. Yes, we still hold individuals accountable, but we also know that humans make mistakes. It is part of the human condition. Asking for a healthcare system where doctors and nurses and other healthcare professionals are free of error is not only unrealistic but also naïve. And it is a set up for failure.

This change in thinking – that providing safe care is fundamentally a systems problem – is a very important step forward and is increasingly accepted by the medical community. And this, Mr. Chairman, is progress. But it is, of course, not enough. Now that we know that unsafe care is largely a systems problem – that is, we have systems that allow errors to occur and fail to safeguard patients, the next question is: what are we doing about it? And, most importantly, has this newfound knowledge made care safer? Here, the news is not so good.

Four years ago, the New England Journal of Medicine published a terrific study from North Carolina hospitals that found that between 2002 and 2007, there had been little or no progress in reducing harm from unsafe medical care.² A recent study led by Dr. John James found that between 200,000 and 400,000 Americans die each year from unsafe medical care, which makes it the third leading killer in the U.S., behind only heart disease and cancer.³ Finally, in an eye-opening November 2011 report on adverse events in hospitals, the Office of the Inspector General (OIG) in the Department of Health and Human Services found that 13.5 percent of Medicare patients suffered an injury in the hospital that prolonged their stay or caused permanent harm or death. An additional 13.5 percent of Medicare patients suffered temporary harm such as an allergic reaction or hypoglycemia. Together, the data suggest that more than one in four hospitalized Medicare beneficiaries suffers some sort of injury during their inpatient stay, much higher than previous rates. The OIG report also found that unsafe care contributes to 180,000 deaths of Medicare beneficiaries each year, and that Medicare pays at least \$4.4 billion to treat these injuries.⁴

Despite all the focus on patient safety, it seems we have not made much progress at all.

The news is not all bad, of course -- and there are areas where we have made meaningful gains. The area of safety that has seen the biggest improvement is healthcare associated infections. And there are two important actors to mention in this space. The first is Dr. Peter Pronovost of Johns Hopkins University. He developed a simple, five-item checklist, which was implemented in over 100 intensive care units in Michigan to reduce rates of central line infections. Each of these infections can cost up to \$50,000 to treat and requires an average of seven additional days in the hospital.⁵ Though the problem of central line infection is complex and expensive, Pronovost's checklist intervention was not. By implementing this checklist, participating Michigan hospitals reduced their rate of central line infections to essentially zero in three months.⁶ Rather than targeting individual providers, the checklist improved the system of care and brought tremendous improvement in outcomes. The checklist program has now been implemented in over 1,100 intensive care units across the country, and is saving lives and resources every day.⁷

The other key player is the Centers for Disease Control and Prevention (CDC). In 2005, the CDC established the National Healthcare Safety Network (NHSN). NHSN is a voluntary, online system that tracks healthcare-associated infections nationwide. The CDC has established standard metrics for assessing and reporting healthcare associated infections (HAIs) and allows providers to collect their own data and report it anonymously and directly to the CDC. NHSN allows providers, healthcare executives, and policymakers to track infection rates and ensure that necessary preventive procedures are being followed.⁸ Thanks to NHSN, hospital leaders are able to compare their facilities with others to see where improvement is needed.

NHSN is based on the idea that good metrics, provided in a timely fashion, can have a profound impact on provider performance. Between 2008 and 2012, rates of central line infections decreased by 44 percent, and rates of infection linked to the 10 most common

surgical procedures fell by 20 percent.⁹ In short, we have made significant progress in reducing the number of infections caused by the healthcare system.

Despite important strides on healthcare-associated infections, recent data on medical errors indicate that we have a long way to go. And, in many ways, the problems that have been described above do not capture the totality of the problem.

While much attention in patient safety has been paid to acute hospitals, we have generally paid far less attention to what happens when patients are discharged. In a different report, the OIG at HHS found that 22 percent of Medicare beneficiaries in skilled nursing facilities (SNF) suffered a medical injury that prolonged their stay or caused permanent harm or death. An additional 11 percent suffered temporary medical injury. All told, OIG estimates that adverse events cost Medicare roughly \$2.8 billion per year, and about half of these events are preventable. The OIG report is particularly alarming given that about 20 percent of hospitalized Medicare patients go to a SNF after discharge.¹⁰ We need a renewed call to improve patient safety as a national priority.

International comparisons

It is instructive to compare our progress on patient safety to other developed countries. The Organization for Economic Co-operation and Development (OECD) Health Care Indicators group measures and compares quality of health services in 20 developed countries. They look at several types of hospital errors including postoperative sepsis, postoperative blood clots (venous thromboembolism), and failure to remove foreign bodies during a medical procedure. For all of these metrics, the U.S. does about average, maybe slightly better (see figures 1-3 below). While average is ok, given that we spend more on healthcare than any other country, we should be a lot better.¹¹ Our high spending is not buying us particularly safe care. In addition, it is hard to say how accurate these rankings are given the variation in how countries report, code and calculate patient safety. Nonetheless, the OECD scores show that hospital errors are not only a domestic issue, but also an international one. With targeted policy efforts, we can become a world leader in patient safety.

Policy recommendations

Given the tremendous amount of work that still needs to be done, the federal government has a responsibility to take meaningful, effective action on patient safety. In most industries, the payer of a service ultimately holds providers of that service accountable for safety and quality. In that way, the federal government, as the nation's largest payer of healthcare, needs to lead on improving patient safety. I believe there are important, bipartisan actions that Congress can and should take to improve the safety of care that Americans receive. In 2011, Dr. David Classen and I published an opinion piece in the *New England Journal of Medicine* that outlined several concrete steps that the government could take to improve patient safety.¹²

The strategy for improvement has to focus on three main areas: metrics, accountability, and incentives. Getting the metrics right may be the most important.

The fundamental problem is that most healthcare organizations don't track the safety of their care.

First, we should ask the CDC to expand its patient safety efforts in the model of NHSN. The 2012 NHSN budget was just \$19 million and with small additional funding, NHSN could expand its monitoring efforts beyond infections to other types of adverse events.¹³ The resources required would be small change compared to the potential savings to the Medicare program. If there is one area of healthcare where simple interventions can save money, it is in patient safety. For example, blood clots cost the U.S. healthcare system somewhere between \$5 billion and \$10 billion per year.¹⁴ If expanded efforts by the CDC reduced the incidence of blood clots by just 1 percent, our country would save between \$50 million and \$100 million annually, not to mention the benefit of increased health for our citizens. This is an opportunity for us to make a small investment that is likely to have huge returns and pay for itself over time.

Next, there are currently a variety of safety metrics being used by different federal agencies. It would be beneficial for Medicare to take the lead, as it did in the creation of the Hospital Quality Alliance, to bring together stakeholders and use a standardized set of safety metrics.

In addition, I believe that health information technology has a critical role to play in improving patient safety. Health IT is a key tool for improving care. All the evidence to date suggests that the passage of the Health Information Technology for Economic and Clinical Health (HITECH) in 2009 has led to significant increases in the percentage of hospitals with electronic health record (EHR) systems. In the first year that HITECH incentives were available, we found that the proportion of hospitals with basic EHR systems nearly doubled.¹⁵ In order to receive HITECH incentives, providers must demonstrate that they are "meaningfully using" their Health IT systems. The criteria for Meaningful Use is determined by the Centers for Medicare and Medicaid Services (CMS), with input from the Office of the National Coordinator.¹⁶ Despite recent progress in adoption of Health IT, most healthcare organizations are not using this tool to maximize its impact on patient safety.

One key role that EHRs can play is helping track adverse events. Most hospitals, even those with EHR systems, do not know their own rates of adverse events. They don't know how often they harm patients. However, there are now tools available that automatically track these events and these tools are generally quite good. Yet, most EHR vendors have not put these tools into their EHR systems. I believe that if we made automated patient safety monitoring a key part of certification for meaningful use, it would have a dramatic effect on the EHR vendor industry. The EHR products now being built would scan clinical data and provide real-time surveillance information to doctors, nurses, pharmacists and other healthcare providers about potentially bad events that might be happening to patients. It would allow hospitals to intervene quickly, and track

their own progress over time. As we have seen with the NHSN program, good metrics provided to stakeholders in a timely fashion can drive systems improvement.

But metrics and reporting alone will not be enough. We also need to make safe care part of the business of providing healthcare. And this requires incentives. In the current system, hospitals with high rates of medical injuries receive nearly the same compensation from Medicare as hospitals that cause fewer injuries. There is little to no incentive for hospitals to spearhead patient safety efforts. My own research suggests that engaging hospital leadership – from boards of directors to CEOs – may be an important target of policy efforts to improve quality and safety. In 2010, I led a study of leadership at 1,000 U.S. hospitals and found that only a minority of board chairs had received training in quality, focused on quality, or believed that quality was even an important priority.¹⁷ As the largest hospital payer in the country, Medicare can do a lot.

One idea that has been suggested is that hospital Boards should receive training in patient safety, and that can be a condition of participation in the Medicare program. Beyond training requirements, CMS must implement robust incentives for hospitals to avoid medical errors.

Some would argue that these incentives already exist under Medicare's Value-based purchasing program (VBP). VBP ties a hospital's payment to its performance on a variety of quality metrics, from avoiding blood clots to correct antibiotic selection for pneumonia patients.¹⁸ This system was designed to move Medicare away from the fee-for-service system, which rewards high volume of care rather than high quality care. I believe that this is a good start, but it is not nearly enough. VBP payments account for only one to two percent of total Medicare hospital payments and the incentives are diffusely spread out across many metrics. Congress has also authorized 1 percent payment cuts for the hospitals in the top quartile of HACs – Hospital Acquired Conditions. This is also a step in the right direction. However, much of the HAC measure is built on metrics that rely on billing information, and likely measure patient severity and coding variations as they do patient safety. Medicare should put both bigger incentives on the table and use high quality metrics that truly capture unsafe care. One idea would be for Medicare to simply not pay for hospitalizations where patients suffer a preventable adverse event that inflicts real harm.

Conclusion

In conclusion, I believe we are at a crossroad. 15 years after IOM's *To Err is Human*, we have made some progress, but we have so much further to go. Hundreds of people are dying every day in U.S. hospitals because of unsafe care. We are not alone – this is truly a global problem. However, with smarter metrics, greater transparency, more accountability and the right set of incentives, we can make big progress. With the right leadership, we can lead the world in patient safety – and the biggest beneficiaries of such an effort would be the American people.

Figure 1: Post-operative sepsis after abdominal surgery. Adjusted rates per 100,000 hospital discharges. (Source: OECD HCQI Program)

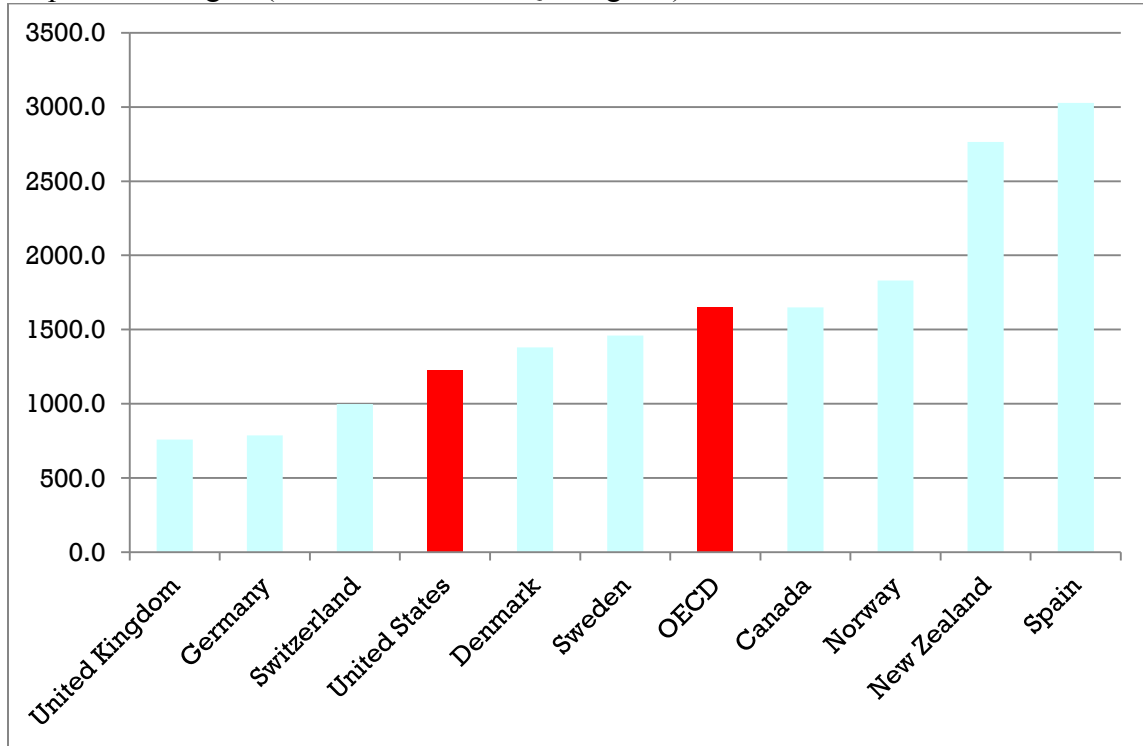


Figure 2: Post-operative venous thromboembolism after hip/knee replacement. Adjusted rates per 100,000 hospital discharges. (Source: OECD HCQI Program)

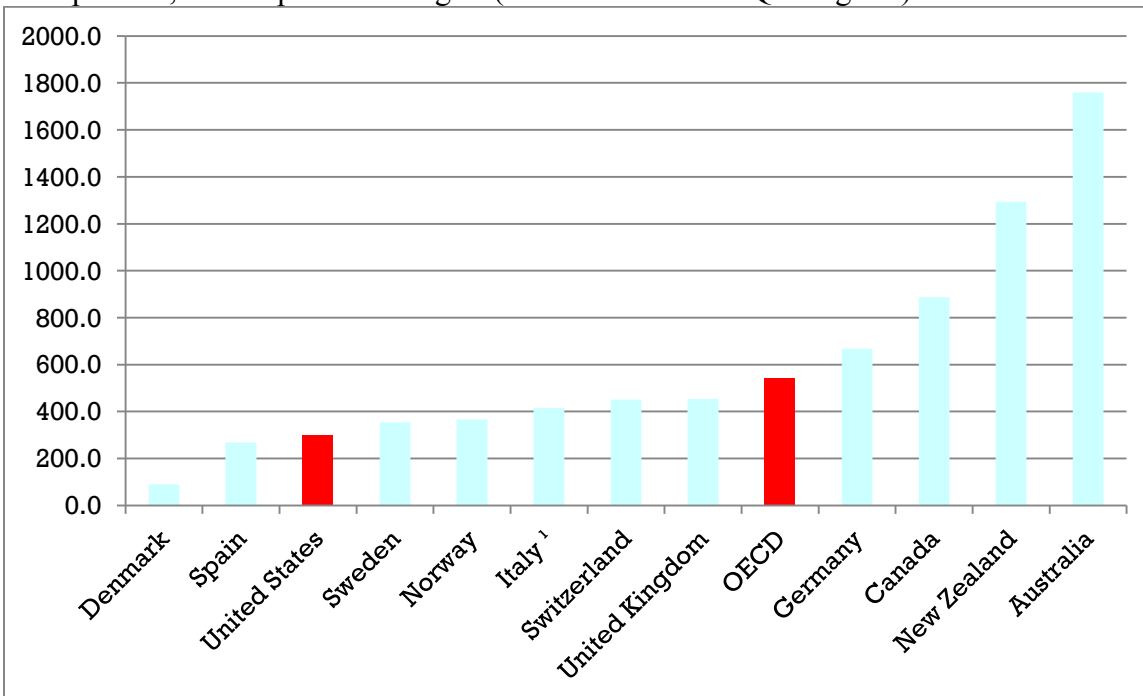
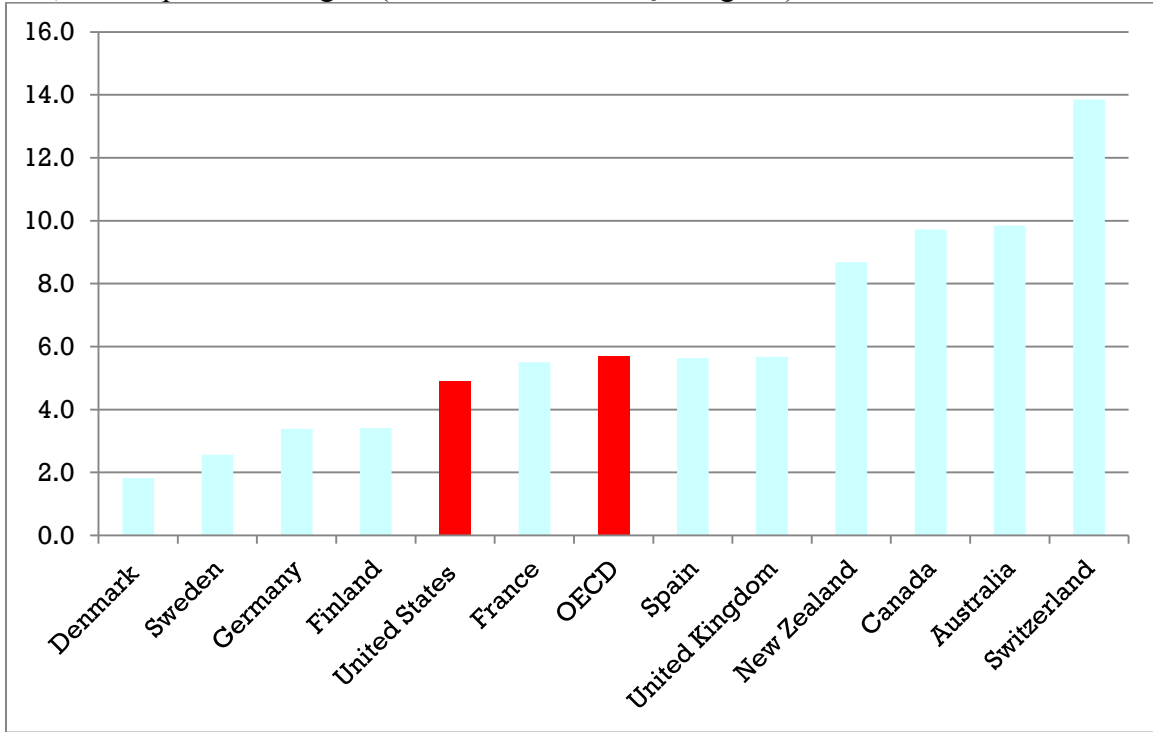


Figure 3: Foreign body left in patient during surgical procedure. Adjusted rates per 100,000 hospital discharges. (Source: OECD HCQI Program).



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