Abstract

Since the Institute of Medicine’s 1999 report *To Err is Human*, it has been known that upwards of 100,000 deaths due to preventable medical errors occur each year.\(^1\) In the twenty years since then, little progress has been made in the way of reducing the number of these deaths and estimates now suggest between 200-440,000 Americans are dying preventably each year.\(^2\) One major component many believe is lacking in the United States is a national agency that focuses on responsibility and accountability for patient safety. This paper will assess the feasibility of creating a National Patient Safety Board to reduce preventable medical errors in care facilities across the country.

Introduction

The Current State of Patient Safety

Accountability in patient safety is currently handled by a number of segmented organizations and governing bodies. There is no single entity that accounts for or tracks the safety of all patients in the country or tracks death or harm caused by medical error.\(^2\) Two of the main organizations that currently deal with patient safety are The Joint Commission and Centers for Medicare and Medicaid Services (CMS).\(^3,4\) Both of these organizations deal with accreditation and standard setting, but neither focus exclusively on patient safety, so regulations and standards can be diluted in the larger obligations of function.\(^3,4\)

The Joint Commission is a non-profit organization that accredits over 20,000 health care facilities and programs. In order to receive Medicare and Medicaid reimbursements, most state governments require accreditation from The Joint Commission.\(^3\) While The Joint Commission is the main accreditation organization in the United States, there are many others like it, which leads to the issue of fragmented patient safety measures and accountability. Additionally, it has been shown that the accreditation process does not indicate greater patient safety.\(^3\)

The CMS partners with state governments to administer Medicare, Medicaid, CHIP, and health insurance standards. The other responsibilities of CMS include maintaining quality and privacy standards in hospitals, long-term care facilities, and laboratories.\(^4\) While the CMS upholds regulations and mandatory reporting practices, critics believe the organization does not do enough in the realm of patient safety because of its broad scope of responsibilities.

Another concern is the availability of data and reporting systems currently present in the healthcare system. As it is with the problem of accountability, error reporting and data collection is fragmented and uncoordinated across the country. The CMS sets rules about what types of occurrences must be reported, but even so there are numerous errors in various types of healthcare facilities that go unreported completely, or are severely underreported.\(^5\) This is also
because most of the current reporting systems are voluntary. Hospital reporting systems capture only a fraction of the true number of events experienced by patients, estimated as low as 14 percent. Many states who work with CMS and The Joint Commission also use dated machines and methods of collecting and compiling data on medical error which, when released publicly, is between 12-24 months old. In combination, these factors lead to a major gap in data collection and understanding of the breadth and possible solutions for preventable medical error.

The final major issue with the current state of patient safety practices is the lack of sharing and access to knowledge regarding preventable medical error. When errors are reported and issues are found within a particular hospital or healthcare facility, the problems investigated and their ensuing solutions are shared only with the members of the particular facility or health group where they occurred. Rarely are preventable medical errors used as examples to help educate a broader group of healthcare providers, individuals, and patients. Medical errors are currently not used nationally as a learning tool to prevent further harm and improve patient safety.

**Existing Models**

**Strengths and Weaknesses**

One current model for tackling patient safety accountability is demonstrated by The Leapfrog Group. The Leapfrog Group focuses on transparency in healthcare and uses safety and quality data to evaluate facilities using a letter grade. The letter grade evaluations allow consumers to directly review and assess a hospital’s level of safety and care. This is a major strength of the model, because consumers are able to determine the best facility for their own care. Additionally, The Leapfrog Group is funded by a variety of stakeholders including Business Roundtable and The Commonwealth Fund. According to CEO Leah Binder, this transparency model works best because it incentivizes hospitals to earn better Safety Grades in order to attract the most consumers (L. Binder, Aug 04, 2020). However, there are also some drawbacks to this model. Critics believe that although having a diverse group of stakeholders is important, organizations like The Leapfrog Group underutilize both patients and healthcare professionals in their process. Another problem is that much of the data used to assess healthcare facilities come from voluntary surveys that may not accurately and completely report all safety and quality related events.

Another existing model is represented by the Agency for Healthcare Research and Quality (AHRQ). The AHRQ is a government agency under the Department of Health and Human Services, whose mission is to compile data and produce evidence to improve the safety and quality of healthcare in the United States. The AHRQ oversees the Network of Patient Safety Databases (NPSD), which collects non-identifiable data from Patient Safety Organizations (PSOs) around the country. This model helps track patterns and reoccurring issues in patient safety using aggregate data. In turn, these patterns can be used to learn how to mitigate patient safety risks in healthcare facilities and reduce patient harm. A major downside of this model however, is that the data is disjointed and difficult to compile because it comes from so many different sources with different data collection systems. Because of this, the trends that are published by the AHRQ are often outdated due to the time it takes to complete analysis. Finally, this model also does not utilize patients and individual consumers in their process.

Two existing agencies that function on a state level are the Pennsylvania Patient Safety Authority (PPSA) and the Oregon Patient Safety Commission (OPSC). The PPSA is an independent state agency that collects information on patient safety events in Pennsylvania healthcare facilities. In Pennsylvania, all incidents of harm
or incidents with potential for harm must be reported. Using these reports, the PPSA creates educational material for patients and providers, resources and consultations, and safety alerts for facilities in the state to be made aware of incidents of error and harm. The OPSC functions similarly. It is a semi-independent state agency that collects information on patient safety events in the state and uses reported data to create a learning network to mitigate patient safety risks. The main difference is that reporting is voluntary, not mandatory in Oregon. Although slightly different in their form and structure, the PPSA and OPSC provide a strong model for what a patient safety agency could look like if it were independent but received government funding. The drawbacks of these models is that if reporting is not made mandatory, then many incidents of harm or potential harm may go unreported. Additionally, all reporting comes directly from healthcare facilities with little to no patient reports and representation.

Perhaps one of the best existing safety models is in the aviation industry. There are several components to how safety is handled in aviation. First, the Federal Aviation Administration (FAA) sets standards and regulations for all commercial and private entities to follow. Most of these regulations are federally enforced, with the FAA also providing some suggested guidelines and advisories to further help with safety. The FAA has an Aviation Safety Information Analysis and Sharing (ASIAS) system in place. The ASIAS collects a wide array of data from various sources that are not only electronic and automatic, but in some cases voluntary and from individuals themselves. These data are then broadly shared in order to learn and improve aviation safety. The next layer in aviation safety comes from a source entirely independent from the FAA and Department of Transportation – the National Transportation Safety Board (NTSB). The NTSB investigates safety incidents in aviation, the railroad industry, and ship and marine affairs. The agency uses its findings to make recommendations, create learning materials, and assist victims of accidents. The major strength of the NTSB is that it is an independent agency that focuses primarily on investigating safety incidents and disseminating recommendations and information that can help avoid future mistakes. The model of information analysis and sharing for learning purposes has shown to significantly improve safety. The weakness of the FAA is that it is not entirely independent and is dependent upon Congress for continued support and funding.

Another existing model is part of the United Kingdom’s National Health Service (NHS). The NHS comprises each of the publicly funded healthcare systems of the four countries in the UK. Under the general umbrella of the NHS, England has a National Reporting and Learning System (NRLS). The NRLS is a central database where all patient safety incident reports are collected and analyzed to identify patient safety risks in order to make improvements. The NRLS data is organized into three official statistic outputs: national patient safety incident reports (NaPSIR), organization patient safety incident reports (OPSIR), and monthly summary data. NaPSIR provides an overview of patient safety along with their characteristics, including the type of incident, type of care facility, and degree of harm. NaPSIR collects data from the largest group of care settings that include dental, mental health, pharmacy, therapy, and optometry services in addition to hospitals, nursing homes, and ambulatory care facilities. The OPSIR clusters organizations by type and allows for comparisons to be made between similar facilities and makes it easier to track trends within each cluster of organizations. Finally, the monthly summaries include timely, key data to encourage consistent reporting. This model’s strength lies in the breadth and depth of reporting and data collection, as well as its provision of consistent opportunities for learning with each set of published reports on the NHS website. The main weakness is that although consistent reporting is encouraged by the NRLS, reporting of patient safety incidents is only voluntary for most facilities.
Creating a National Patient Safety Board

Challenges
Some of the main challenges in creating a National Patient Safety Board are related to the weaknesses of the existing models previously mentioned. One such challenge is incorporating a variety of stakeholders in the structure of an NPSB, without allowing special interests from any one group to take over. Often there are a few parties left out of the picture with little to no representation, such as patients and families, who have actually experienced harm in a healthcare setting. An NPSB must also use data to inform recommendations and investigate incidents of potential harm. However, data collection is difficult to consolidate across the nation due to the wide range of reporting practices, lack of clear reporting guidelines, and outdated and disjointed data collection systems in different parts of the healthcare system. Another issue with data collection is the voluntary aspect of current reporting practices. Many healthcare facilities push for reporting to remain voluntary in order to avoid repercussions of higher reported incidents of harm or potential harm. Without mandatory reporting, data collection cannot be complete and accurate assessments of patient safety risks cannot be made. Finally, the influence of money from healthcare organizations, the government, lobbyists, and policy makers all greatly impact the potential to create an NPSB. The interests of these groups rarely align with optimizing patient safety, because the current system focuses on profits rather than individuals.

Recommendations
The Patient Safety Movement Foundation believes that the creation of an independent, transparent, and data-driven National Patient Safety Board could significantly reduce patient harm and preventable deaths in healthcare facilities. The proposed NPSB would be an independent state agency that focuses on collecting information on patient safety events, investigating patient harm in facilities, and using findings from data to make recommendations and facilitate learning.

The first step in executing an effective NPSB would be to standardize reporting practices. Currently, reporting is only sometimes mandatory, and the agencies that healthcare facilities report to are often different and require different reporting documents and technology. With an NPSB in place, all the different reporting agencies would need to submit required information to the NPSB in order for the data to be compiled.

The data collection and compilation would be the next step in executing an effective NPSB. The NPSB would use up-to-date, available technologies to compile existing data coming from agencies like CMS, The Joint Commission, and state patient safety agencies. Additionally, the NPSB would collect data from facilities and areas that may not currently have mandated reporting practices through another agency, using the standardized reporting practices mentioned above. Patient reporting would also be utilized in data collection practices. This compiled data would then be used to track trends in patient safety and investigate any incidents of serious harm to patients.

Next, the investigation aspect of the NPSB would be very similar to the process used by the NTSB. The NPSB would investigate serious instances of patient harm to determine what mistakes and underlying factors led to an adverse outcome. The healthcare facilities, providers, and medical groups involved would all be part of the investigation to get a thorough understanding of what problems emerged. Based on the findings of an investigation, the NPSB would then move on to the recommendation and learning phase.

After completing the investigation, the NPSB would use the investigative
findings to create consumable materials for healthcare facilities, providers, and patients to review. These materials would aim to be transparent in relaying what issues were found in the investigation, without breaching privacy of the entities involved. The NPSB would issue a report on the preventative measures that could be taken in the future to avoid a similar adverse patient safety event. In addition to the report, resource documents for patients and healthcare providers would be made publicly available online. These resources will provide helpful information on how to prevent and avoid adverse patient safety events in the future.14, 15

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References


About the Patient Safety Movement Foundation

Each year, more than 200,000 people die unnecessarily in U.S. hospitals. Worldwide, 4.8 million lives are similarly lost. The Patient Safety Movement Foundation (PSMF) is a global non-profit on a mission to eliminate preventable patient deaths from medical errors. PSMF uniquely brings patients and patient advocates, healthcare providers, medical technology companies, government, employers, and private payers together under the same cause. From our Actionable Patient Safety Solutions and industry Open Data Pledge to our World Patient Safety, Science & Technology Summit and more, PSMF won’t stop fighting until we achieve zero. For more information, please visit www.patientsafetymovement.org.