# **STOP THE SILENT KILLER**

### HOW THE RIGHT DIGITAL TECH CAN ELIMINATE MEDICAL ERRORS



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## i INTRODUCTION

Medical errors are now the third leading cause of death in the United States. A Johns Hopkins University study conducted earlier this year found that only heart disease and cancer are higher on the list.

This jarring statistic can be linked to a lack of data quality and process control, along with staff accountability throughout the care continuum. Without these measures in place, clear communication is not possible for healthcare professionals.

Forward-thinking healthcare providers are creating best practices to address medical errors in the care continuum. While remedies to combat this silent killer do exist, they will require a digital transformation in the provision of healthcare services.

Read on to learn more about healthcare provider approaches, best practices, and digital technologies to consider that will help improve care across the continuum.





Medical errors are perhaps the most extreme form of a silent killer. For the most part, the public is not aware they are happening, and little research has been conducted into their prevention.

Medical errors fall right behind heart disease and cancer as the leading causes of death in the United States. Over 250,000 people meet their demise each year from medical errors.

Source: Johns Hopkins University Study, May 2016

With the rising frequency of medical errors, patients are suffering the ultimate consequence. Healthcare providers have their own impacts and risks as well, including the burden of failing their responsibilities to their patients and the costs of malpractice insurance coverage they must carry to protect against potential lawsuits.

## **1** THE SILENT KILLER

Of course, when people think of medical errors, the first things that come to mind are the huge gaping errors highlighted in the media:

- The wrong leg being operated on
- A patient having an incorrect procedure performed

But those are the rarities, and mistakes don't always happen at the hands of physicians and nurses or, for that matter, even inside a hospital.

In fact, many medical mistakes happen after a patient leaves the hospital: In home healthcare environments, pharmacies and extended care facilities.

#### How to fight this silent killer?

Regardless of where and when the medical errors occur across the continuum of care, clinicians of all kind must be guaranteed that the information they have about their patients is clean, concise and up-to-the-minute data.



### ) REASONS FOR RISING MEDICAL ERROR RATES

One of the biggest factors causing repeated medical errors is the lack of organization and communication when it comes to medical records, alongside the obvious shortfalls of checks and balances within medical record recordings.

In addition, when people move from provider to provider, each likely has a different form and instance of electronic records management in use. Oftentimes, patients assume their records are transmissible between the separate providers, when in fact, for example, their radiologist's Electronic Medical Records (EMR) system can't work with their general practitioner's EMR system, causing an increased risk for error.

Of the \$30 billion in "Meaningful Use" incentives that the U.S. Congress appropriated to help shift the system to EMRs – to ensure better coordination of care and reduce errors across the board – relatively little went to nursing homes, rehabilitation facilities, or providers working with individuals in their homes.



### **REASONS FOR RISING MEDICAL ERROR RATES**

Despite the leaps and bounds forward that the healthcare industry has made with EMRs, the disjointed care continuum continues to rear its ugly head.

Studies find that healthcare technology can have a positive impact on the quality of care, specifically in the realm of patient safety.

EMRs, while a major step forward in the digitization of healthcare, cannot assure quality care if they are disconnected from the people and processes that surround the patient in the first place. Thus process and data improvement best practices must be implemented along with digitization.



### THREE BEST PRACTICES FOR IMPROVING CARE QUALITY

Innovative healthcare providers are focusing on introducing holistic improvements that incorporate people, process and technology, to move the dial on care quality.

#### What Is Quality?

The Institute of Medicine defines healthcare quality as "the degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." Four important quality domains are:

Effectiveness: Providing care processes and achieving outcomes Efficiency: Maximizing the quality of care delivered for resources used Patient Centricity: Ability to meet patient needs and preferences and providing education and support Timeliness: Obtaining needed care while minimizing delays

#### **1. Provide Unified Patient Information Views**

Performance and visibility problems are created by siloed sets of enterprise data. This disconnected information prevents a complete and accurate patient view. Therefore, selecting technology that not only unifies patient data for customer-facing employees but also increases collaboration across the organization, is recommended.



### THREE BEST PRACTICES FOR IMPROVING CARE QUALITY

#### 2. Enable Access to Real-Time Data

Real-time capabilities, as opposed to outdated batch process models, allow for the most up-to-date information flow possible. This permits clinicians to make decisions based on the latest and greatest patient data at their fingertips, thereby getting that patient healthier, faster, and in the safest manner possible. Many healthcare agencies have put substantial effort into addressing patient data being updated throughout their systems the minute new data is entered. However, many areas are still lagging behind, leaving room for error and frustration from both medical professionals and the patient.

#### 3. Enforce Segregation of Duties

Whether it is a task worker who requires a simplified interface to conduct routine, repetitive work throughout the day, or a patient care manager who needs a 360-degree view of the inner-workings of the entire organization in real-time, segregation of duties is critical. Ensure both the technology and the process guidance provide the appropriate levels of access and visibility based on the role and provisioning of the user. In addition, ensure that access is tracked and auditable – keeping track of who does what and when for increased accountability.

### 4

### THE RIGHT DIGITAL PLATFORM FOR PREVENTING MISTAKES

In order to reduce the number of medical mistakes, the proper digital platform is a necessity.

The proper digital platform will enable a **unified view** to solve the business performance and visibility problems created by siloed sets of enterprise data across the organization. If left untouched, these issues can easily infringe upon having the most accurate patient data. The right digital platform will also work hand-in-hand with the Continuity of Care Document (CCD) standard that enables physicians to send a patient's electronic medical information to other providers. Even if that other provider runs on a different EMR system, no information will be lost, thus, improving patient care and cutting down on the instances where life-altering medical mistakes can occur.





### 4

### THE RIGHT DIGITAL PLATFORM FOR PREVENTING MISTAKES

The right digital platform consists of **real-time capabilities** that show what's happening, when it's happening, helping clinicians make decisions based on the most accurate information, thus, cutting down on further risk of error. Real-time functionality allows healthcare workers to see changes to their patient's status as soon as they are entered, not hours, or sometimes even days later.

The right digital platform will support business roles and process controls that provide **segregation of duties**, to keep track of who does what and when, for increased accountability.

Perhaps most importantly, the ability to quickly build, deploy, and evolve business applications is what separates leaders from laggards. The right digital platform supports a lean Agile approach to application development and provisioning, so the organization can focus on quality care, rather than untangling packaged solutions or even "ripping and replacing" legacy systems.







Medical errors are an increasing threat to the quality of care. However, data quality and process control measures can remediate what is now the third leading cause of death in the United States.

The best way forward?

Follow proven best practices, and take an innovative technology approach with a digital application platform.

Choosing the right platform will be critical.

Appian's low-code digital application platform—powered by Business Process Management (BPM)—is at the forefront of digital technology with the capabilities necessary to help healthcare organizations proactively prevent medical mistakes.







#### **The Appian Platform:**

- Allows healthcare systems to unify and cleanse their data stream automatically and in as custom a fashion as they see fit.
- Ensures a unified view of information to enable: faster and smarter actions by customer-facing employees, increased collaboration and productivity across the organization and holistic visibility into the overall health of the business for executives.
- Provides the appropriate levels of access and visibility based on the role and provisioning of the user.

- ✓ Allows data within EMRs to bevisible and actionable as soon as it's entered, unlike outdated batch processing where parts of electronic medical records may only be updated once or twice a day.
- ✓ Evolves with the ever changing government regulations that come with EMRs. Appian's digital platform has the ability to easily morph as regulations are amended in order to stay up to date with the most current governance.

The Appian Platform will allow healthcare providers to build and deploy quality, cutting-edge apps 10x faster. All of this ties together for the ultimate goal:

Eliminating preventable medical mistakes to ultimately improve the quality of care.

### **ABOUT APPIAN FOR HEALTHCARE**

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Appian delivers an enterprise platform for digital transformation in healthcare that enables payers and providers to bridge core systems, enhance member experience, and significantly improve patient outcomes. Powered by industry leading Business Process Management (BPM) and Case Management capabilities, Appian's low-code approach can radically accelerate the time it takes to build and deploy powerful, modern applications, on-premises or in the cloud. The world's most innovative organizations use Appian to revolutionize their customer experiences, transform their business operations, and master global risk and compliance. For more information, visit www.appian.com.

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