Integrating Data in Healthcare

An overview of Integrating Data in Healthcare: What do we need to know?and more

Introduction

The medical industry heavily relies on data integration to improve established healthcare models. Additionally, data integration strategies in pharma are being leveraged across all levels of the value chain, from invention to manufacturing to commercialization. Only 56% of healthcare units are able to utilize all of their data streams effectively. This means that nearly half of the healthcare industry is missing out–resulting in approximately $342 billion in losses for healthcare units.

Data integration challenges in healthcare

- **Standardizing data formats is not feasible**

The Economic Times reported that there are now close to 400,000 health apps that track heart rate, blood pressure, sleep patterns, calories consumed, physical activity, blood sugar levels, and cholesterol levels.

Data collection and aggregation communities are equally fragmented, making the extraction and integration of data a real challenge. There is an abundance of data being collected by providers, payers, public health specialists, employers, social networking communities, and patients, but there is no effort being made to unify the information. There is divergence and duplication of data with no single source of truth. In the process, inaccurate and incomplete health care member profiles are created, providing little insight into a patient's well-being journey and their ever-evolving relationships with their healthcare providers, payers, pharmacies, and friends and family.

- **Data silos between healthcare systems**

Approximately 97% of the hospital-generated data sits unused, according to the World Economic Forum (WEF). This data has the potential to modernize the healthcare industry. It is because hospitals have traditionally found it difficult to manage large, heterogeneous data sets from a variety of sources. A doctor's appointment can be made difficult, time-consuming, and inefficient by data silos. In addition to streamlining the appointment process, connected systems can also streamline the entire patient process: from scheduling a new appointment to following up with the patient after the visit. Patients can easily input their health data when booking appointments so

they don't have to complete it in a doctor's office or verbally share it with the medical staff, wasting valuable face-to-face time.

● **Misconceptions regarding data exchange and data privacy**

The laws concerning data confidentiality and privacy are not fully understood by some healthcare units. Despite the necessity of safeguarding data from unauthorized access and modification, it is also important to share it under specific circumstances. It can be challenging to balance these two concerns, however, it is not impossible. A secure end-to-end encrypted environment allows healthcare units to minimize the risk of data breaches while only allowing authorized users to access data. This ensures the security of the data.

Healthcare Automation: How It Helps

● **Data Integration Helps Manage Risks**

A patient's safety is the first step in proper healthcare risk management. Only a few industries are responsible for protecting the lives of their customers. Patients, families, and organizations can suffer serious consequences even from minor errors in such a critical sector.

Sharing information with patients is much easier with streamlined solutions, and hospitals and healthcare facilities can also ensure that patient information is secure and confidential. It is important for health care providers to comply with HIPAA and other regulations, but if a breach of patient information occurs, the impact on patient trust can be far greater. 50% of consumers report they'd switch healthcare providers if their sensitive health information was breached. Building loyalty is a key component of delivering improved patient care and building a successful practice in an increasingly competitive industry.

● **Reduce staffing load and work hours**

This lack of balance comes in part from physicians feeling like they have less free time outside of work. A

● **Data Transferability: A major issue**

The needs of a healthcare unit can't be addressed by a single app. It's more than likely that they would rely on several applications to serve their various users. To ensure data-driven insights, these apps should provide consistent information. Integration systems enable companies to accomplish this. Integrating multiple applications and data allows users to provide accurate insights - easily and securely. Data integration underpins healthcare success. In addition to consolidating all kinds of data, it facilitates the fast delivery of insights to drive decision-making and improve patient care.

survey found that 64% of physicians think they have less free time now than they did at the beginning of their careers. Furthermore, 22% spend more than an hour each day on paperwork and entering data into electronic health records.

Healthcare facilities and hospitals can boost their bottom lines and reduce burnout among employees and professionals by integrating integrated systems and automating workflows. But most importantly, we can put the focus back on delivering quality care to patients, the most essential piece of the healthcare puzzle.

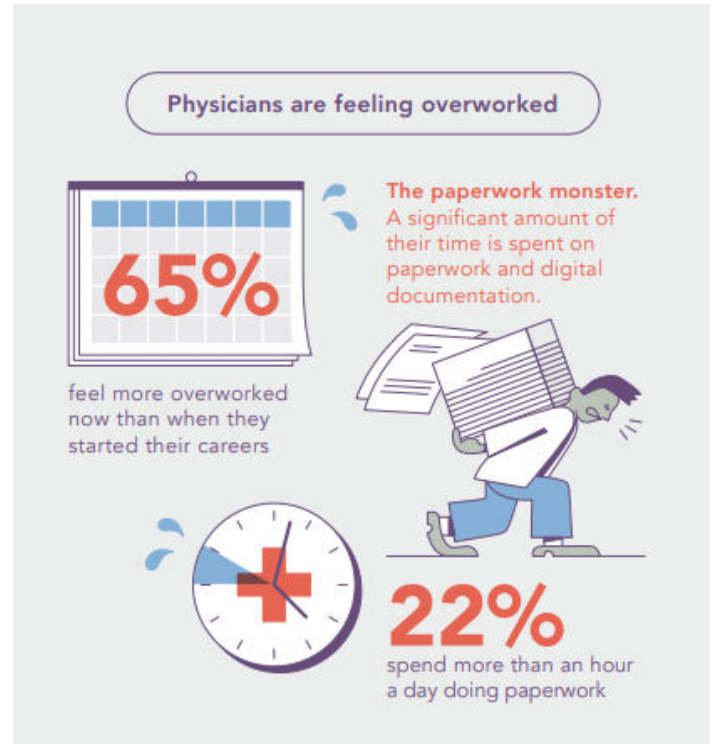● **Providing a positive patient experience**

"Many hospitals are finding that small changes, like having nurses visit rooms hourly, often improve patients' responses to the surveys more effectively than do new, hotel-like amenities." And each moment spent dealing with a technological mishap automatically reduces the amount of patient-facing time clinicians have available. In addition, one of the most common complaints that patients cite (one that could be improved by addressing the same problems

that result in failures to discharge patients promptly) is the long wait time that plagues most health facilities.The New York Times reports. With simplified processes and integrated, automated systems, we can engage patients throughout the process and enable them to easily access their health information whenever they need it, making them feel more empowered. Hospitals and healthcare facilities can set a strong precedent for offering patients digital-first capabilities by digitizing patient onboarding from the beginning. Personalized surveys and follow-ups can also benefit from this positive digital experience.

- **Reducing Human error**

It is possible for even the slightest errors in diagnosis or treatment to have devastating consequences for the patient, as well as for the organization. Because the work is manual and tiresome, human error is likely to occur. Using automation, clinicians and patients can be sure that their treatment or remedy is the most appropriate and efficient one. Machines leave no room for blunders and offer timely services via their framework and the platform in use. The use of these tools also facilitates a more accurate and clear diagnosis, which, in turn, reduces the likelihood of misdiagnosis, malpractice, and the use of incorrect treatments.

Data suggests that more than 50% of the physician workforce is burnt out. Medical burnout is a major consequence of excessive administrative burdens, which in turn adversely affects the quality of care and further increases costs.

Physicians are feeling overworked

65% feel more overworked now than when they started their careers

The paperwork monster. A significant amount of their time is spent on paperwork and digital documentation.

22% spend more than an hour a day doing paperwork

Physicians' free time is declining

64% say they have less free time now than when they began their careers

PRACTICING MEDICINE SHOULD FEEL LIKE A CALLING. NOT A SENTENCE.

Recommendations

Automation in healthcare suggests making the use of distinct software that heightens efficiency in various elements of medical services. This advocates making use of modern techniques and tools for the reasons of productivity as well as capability. The healthcare industry is being redefined with the use of automation by unlocking efficiencies that would not be attainable with manual operations.

- Increase the efficiency of operations automating routine actions

- Reduce human error, ensure task and output consistency, and enable businesses to successfully implement measures to enhance data accuracy, operations, and documentation in clinical settings and elsewhere

- Improve healthcare personnel productivity by automating jobs that don't normally require human or cognition, teams to focus on more difficult duties

- Improve patient experience by providing more consistent treatment through more accurate judgments, lower costs, and more insights across the complete medical record

Conclusion

Healthcare is becoming more automated through integration, although it remains important to distinguish true automation from claims made by vendors. Several healthcare tasks can be automated, so the most important thing is to prioritize the tasks that will have the greatest benefit from automation. Among these benefits are lower costs, improved patient satisfaction, and enhanced efficiency among employees. Despite this, automated healthcare solutions rarely lead to a reduction in staff.