



MilagroAI

Solving Medical Data problems through AI and Automation

ealthcare is known for being a data-rich, but information-poor sector. While much health data from numerous sources such as EHR/ EMR, bedside monitors, medical imaging, and DNA sequencing are being amassed, the ability to use the data to enhance healthcare providers' performance and deliver better patient outcomes has been a significant weakness within the sector. The healthcare organizations have the data to prevent harm, yet cannot use it in realtime to predict the risk of readmission before a patient is discharged, or to predict the risk of bloodstream infections before there are clinical symptoms. To help healthcare institutions harness the full benefit of the available sea of data, various AI companies are emerging in the marketplace. Each of these companies is typically trying to solve just one of the several healthcare problems such as the number of patients who might need ICU, the risk of readmissions, the probability of hospital-acquired infections, and so on.

Moreover, they all face the same initial barrier, which is the condition and usability of the data within the EMR and other sources. With their traditional approach to developing an algorithm, they need extensive human resources – generally data scientists and clinicians working together to better prepare existing data. It requires a huge budget and a minimum of 12 to 18 months to provide a single solution. If the hospitals want to add a new solution, they usually have to approach another "niche" Al company. This condition has led to delayed deliveries and fragmented solutions that have adversely affected the healthcare sector. Healthcare organizations face an urgent and immediate need for a robust and reliable Al solution provider that helps harness the full potential of data and automates the most challenging medical data problems.

Enter MilagroAI.

A promising data-driven AI platform provider, MilagroAI has emerged as a savior for hospitals to address medical data-related problems. With its unique and powerful



real-time AI, surveillance, and data abstraction platform, MilagroAI is on a mission to make healthcare data simple. The company harnesses the full power of EMRs and revolutionizes the ease and speed with which medical data solutions are created to help clinicians save lives and reduce healthcare costs by predicting and limiting harm to patients and thus improving outcomes.

MilagroAI was established in Israel five years ago initially to detect, monitor, and predict hospital-acquired infections. The company partnered with Sheba Medical Centre, one of the top 10 hospitals globally, and automated the complete CDC guidelines, which has around 750 different variables and algorithms that are not computerready. What truly differentiates MilagroAI from other AI vendors is its ability to automate every aspect of data processing.

The Power of Data-Driven AI Platform

MilagroAl automates and transforms live unusable Electronic Medical Record data in real-time into solution-ready clinical information. The company achieves this feat through two major proprietary breakthroughs – first, a revolutionary advance in clinical language understanding (CLU) and, second, significant leaps in data abstraction. With these features, the platform segregates and interprets the data for any purpose, equivalent to the clinicians' team. "Our platform is highly efficient at making the data ready to solve all the data-driven needs in healthcare that each of the Al companies is trying to solve separately," asserts Amit May-Dan, CEO of MilagroAl.

On the revenue side of the business, the company serves Assuta Health System where Milagro's breakthrough technology is currently automatically coding complex surgeries in real-time in multiple departments. The company's AI platform is also integrated with automated surveillance for hospital-acquired infection surveillance and reporting processes.



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The first and only company to fully automate the CDC guidelines, MilagroAI can classify all the relevant HAI's in true real-time with 100 percent accuracy, eliminating all the manual processes currently performed in every hospital infection control specialist. It further uses a predictive algorithm to determine which patients will develop a bloodstream infection 4 to 12 hours before displaying any clinical symptoms with 92 percent accuracy. Today, MilagroAl has created the platform with several other solutions to provide frontline clinicians with the information needed to make better decisions. According to May-Dan, "Data is harnessed and analyzed not just to make decisions and predictions, but to develop the whole registries, automate and simplify the retrospective chart review (RCR) process. However, the problem with the hospitals is that they have a lot of data locked up in the EMR and they are not able to leverage it in real time. So, we have built a bridge to fill that gap."



Setting a Benchmark in the Healthcare Industry

MilagroAl's partnership with a large Israeli public health system to reduce hospital-acquired infections system-wide displays some of their platform's capabilities. The firm successfully replaced the manual process of surveillance and RCR process with 100 percent accuracy. Another aspect of MilagroAl that impressed the client was its ability to completely automate the CPT codes for billing, the surgery code. These codes are considered to be the most complex codes to automate. "We were able to completely automate the codes with the help of Assuta and with more than 96 percent level of accuracy, which is better than human coders," affirms May-Dan.

With such unmatched capabilities and proven success stories, MilagroAI is set to provide its platform in every public hospital in Israel. With the recognition and acknowledgment that there is no other AI organization that has reached this place, the company has now moved to the US's big market. And today, MilagroAI works in nine hospitals of one of the world's largest health systems, with plans to be in all of its hospitals. Greg Hobbs MD, CEO of MilagroAI USA, states, "We realize that we are providing something unprecedented and substantial, and we are seeing that it is being clearly understood by some of the biggest players." For the road ahead, MilagroAI is working toward becoming the standard platform in every hospital in the US. HT