

# Future of Cost Containment in Health Care

How artificial intelligence, predictive analytics and virtual second opinions are changing the world of medical diagnosis and helping companies, health plans and employees slash health care costs.

By Faye Brookman

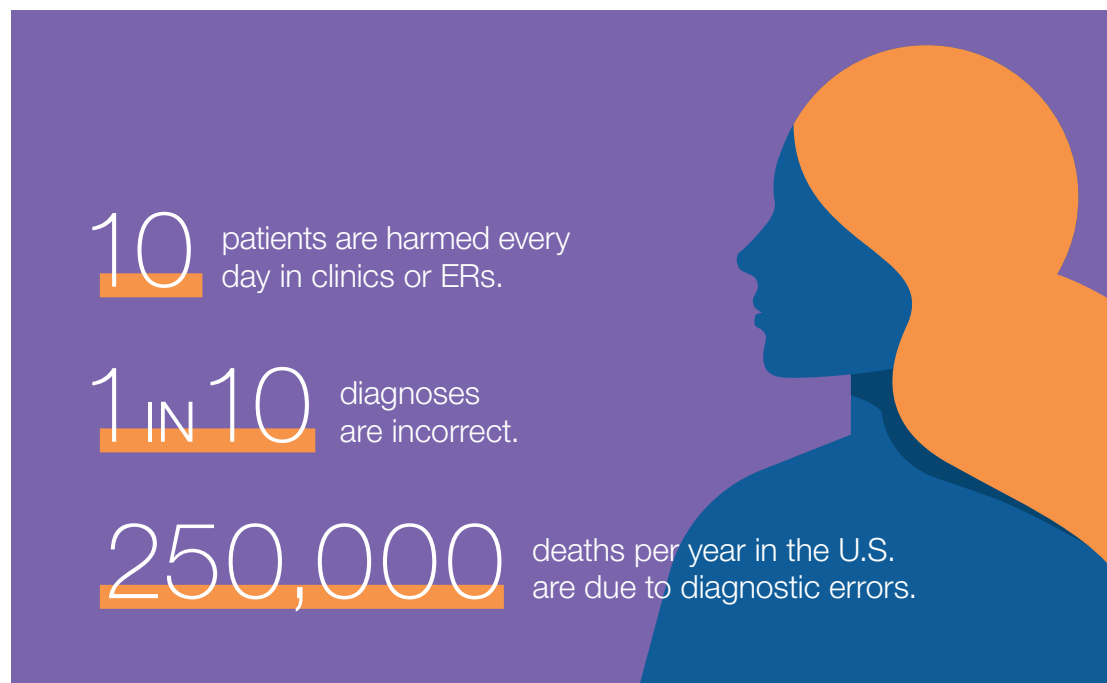
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Most Americans will encounter at least one diagnostic error in their lifetime, according to a report from the Institute of Medicine (now known as the Health and Medicine Division of the National Academies).

Furthermore, the Kaiser Family Foundation says nearly 1 in 3 patients or their family members have been affected by a preventable medical error with 21 percent suffering a serious health consequence. The number of hospital deaths due to medical errors has escalated to more than 250,000 annually.

And now, after many years of the lens being fixed on treatment errors, diagnostic mistakes are coming into focus. Not only does a misguided diagnosis take a toll on a patient's physical and emotion well-being, it places an unnecessary financial burden on the health care system. Preventable medical errors and subsequent care requirements are estimated to cost the United States between \$17 and \$29 billion each year, according to the Health and Medicine Division of the National Academies.



## Why the mistakes?

There are many reasons for the widespread errors. The problem of fragmented medical information, despite advancements in electronic records, is still a major issue impacting medical quality.

Time is also a luxury many clinicians lack in today's pressurized health care environment. Some estimate that doctors are only able to spend 13 to 16 minutes with each patient. Furthermore, there is difficulty accessing true expertise, especially for tricky diagnoses.

However, the future is looking brighter, thanks in many parts to fusing technology with some of the best minds in medicine.

"Misdiagnosis is something that can be fixed," says Dr. Lewis Levy, the chief medical officer for Best Doctors, a global health company that specializes in solving the unsolvable in health care by connecting individuals facing difficult treatment decisions with the best physicians across 450 subspecialties.

## New solutions

In recent months, Best Doctors has made headlines by combining the cognitive computing genius of IBM Watson with the human knowledge of over 53,000 of the world's leading physicians. "It is well established that it takes 17

years on average for science to be translated into the best clinical practice," explains Levy. "It is very difficult for practicing physicians to stay abreast of all the medical changes because of the rapid changes in science. Watson can read 200 million documents in three seconds. Now, Best Doctors is helping to bring that power into personalized medical decisions."

To that end, cognitive computing solutions can be highly effective when paired with top medical experts. In January, IBM started combining the analytical capability of Watson with the clinical expertise of real-life physicians at Best Doctors in an effort to

provide deeper insight into a patient's diagnosis and treatment.

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Another way to reduce mistakes and help mitigate costs is predictive analytics. This involves identifying individuals who may be at a very high risk of having a misguided diagnosis or misdirected care. These include patients struggling with cancer, gastrointestinal disorders, lung and heart problems. By identifying and helping the right people, misdiagnoses and errors are dramatically reduced. This spares the physical and emotional toll of incorrect treatments, while saving countless dollars in the process.

Second opinions have been validated as a solution for reducing error. In fact, a second look from Best Doctors produced measurable differences including a change in treatment in 78 percent of cases, and an alteration or clarification of a diagnosis in 42 percent of cases. In 2016 alone, Best Doctors produced \$98 million in savings for its clients. "The future of cost containment in health care is already here, and it is a strategic combination of top medical expertise and innovative technology," added Levy. ■