Dynamic Chiropractic

CHIROPRACTIC

Chiropractic by Machine Only?

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"Artificial intelligence is a branch of computer science capable of analysing complex medical data. Their potential to exploit meaningful relationship within a data set can be used in the diagnosis, treatment and predicting outcome in many clinical scenarios."

While the above may seem like an excerpt from a current article, this statement comes from a research paper published more than 16 years ago. In the paper, the author notes, "The application of AI technology in the field of surgery was first successfully investigated by Gunn in 1976, when he explored the possibility of diagnosing acute abdominal pain with computer analysis."

AI is currently challenging the ability of medical experts to correctly interpret X-ray findings. As a recent study revealed, "well-trained AI algorithms can reach performance levels similar to radiology residents in covering the breadth of findings in AP frontal chest radiographs, which suggests there is the potential for the use of AI algorithms for preliminary interpretations of chest radiographs in radiology workflows to expedite radiology reads, address resource scarcity, improve overall accuracy, and reduce the cost of care."

A report released by medical malpractice insurer The Doctors Company found the following:

- 53 percent of physicians are optimistic about the prospects of AI in medicine.
- 35 percent of physicians are currently using AI in their practices.
- 66 percent of physicians believe AI will lead to faster, more accurate diagnosis.

Insurance companies are already utilizing AI in their claims handling processing to detect fraud and prevent risk. Regarding AI, it has been predicted that "in the not-so-distant future, technology will dramatically impact both insurance companies and people with insurance." This transformation could result in discriminatory pricing for health insurance for people who are actively involved in improving and maintaining their health to receive better rates.⁵

Make no mistake, AI is here to stay in health care and its impact is growing quickly. Your practice has probably already been subjected to AI; you just didn't know it. It will not be long before AI will be included in the technology provided by various equipment manufacturers.

AI goes hand in hand with Big Data. The ultimate result is the ability to see how every point of care impacts the patient, make the best decisions based on the most reliable data, and reduce the overall cost of care. Most recently, this has demonstrated how chiropractic care can reduce the use of opioids.

Navigating changing times is not easy, but it is always necessary for success. AI is one more tool in the pursuit of optimal care. Used correctly, it has the power to help you be a better doctor and improve your patients' health in less time. But like all things powerful, it is something to keep an eye on.

References

- 1. Ramesh AN, Kambhampati C, Monson JR, et al. Artificial intelligence in medicine. *Ann R Coll Surg Engl*, 2004 Sep;86(5):334-8.
- 2. Gunn AA. The diagnosis of acute abdominal pain with computer analysis. JR Coll Surg Edinb, 1976;21:170-2.
- 3. Wu JT, Wong KCL, Gur Y, et al. Comparison of chest radiograph interpretations by artificial intelligence algorithm vs radiology residents. *JAMA Netw Open*, 2020;3(10):e2022779.
- 4. How AI's Healthcare Potential Outweighs its Risk. The Doctors Company.
- 5. Rivelli E. "How AI Is Bringing the Insurance Industry Into the Future." Bankrate.com, March 12. 2020.

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