Clinical trial matching project sees higher enrollment in breast cancer trials through use of artificial intelligence

8 March 2018

Credit: Mayo Clinic

Mayo Clinic and IBM Watson Health today unveiled results from early use of the Watson for Clinical Trial Matching, an IBM cognitive computing system. Use of this system in the Mayo Clinic oncology practice has been associated with more patients enrolled in Mayo's breast cancer clinical trials.

The organizations also announced an agreement that aims to extend and expand training and use of the system. Training on trials for additional cancer types is already underway. Currently, the system is trained to support clinical trial matching for breast, lung and gastrointestinal cancers.

Clinical trials offer patients access to promising new and emerging treatments. But matching and enrolling patients in appropriate trials is a time-consuming, manual process. Only 5 percent of patients with cancers participate in clinical trials nationwide. With low enrollment, many clinical trials are slow to finish or not completed. This delays advances in research, access to better therapies and improvements in patient care.

"Novel solutions are necessary to address this unmet clinical need, advance cancer research and treatments, and, in turn, improve the health outcomes of patients," says Tufia Haddad, M.D., a Mayo Clinic oncologist and physician leader for the Watson for Clinical Trial Matching project.

Dr. Haddad will describe the project today at the Healthcare Information and Management Systems Society Annual Conference and Exhibition in Las Vegas.

Watson for Clinical Trials Matching aims to accurately and consistently match patients to clinical trials for which they may be eligible, so that health care providers and patients can consider appropriate trials as part of a care plan. Over time, a team of Mayo experts determined optimal workflows and screening processes, and began educating patients about clinical trials. In July 2016, Mayo implemented the system with a team of screening clinical research coordinators in its ambulatory practice for patients with breast cancer.

In the 11 months after implementation, there was on average an 80 percent increase in enrollment to Mayo's systemic therapy clinical trials for breast cancer. The time to screen an individual patient for clinical trial matches also fell when compared with traditional manual methods.

"This has enabled all patients to be screened for all available clinical trial opportunities," Dr. Haddad says. "The speed and accuracy of Watson and the team of screening coordinators allow our physicians to efficiently develop treatment plans for patients that reflect the full range of options available to support their care."

Mayo Clinic and IBM Watson Health plan to continue developing the system so it can include trials for other types of cancer and aspects of cancer care beyond medical therapies, such as surgery, radiation and supportive care.

Provided by Mayo Clinic

APA citation: Clinical trial matching project sees higher enrollment in breast cancer trials through use of artificial intelligence (2018, March 8) retrieved 5 September 2022 from https://medicalxpress.com/news/2018-03-clinical-trial-higher-enrollment-breast.html