

Video: Artificial intelligence massage therapy? Meet the robot being studied by Mayo Clinic

March 17 2023

Getting a massage from a robot may seem like something out of a science fiction story, but it could be a reality in the not-too-distant future. Mayo Clinic in Rochester, Minnesota, is looking into the possibility of robotic massage as an answer for patients' pain relief and alleviating some staffing burdens.

This is EMMA. EMMA stands for expert manipulative massage automation. It's a robot designed to give a therapeutic form of massage called Tuina.

"Some people call it Chinese massage, but it's actually a very comprehensive approach that is mostly used for [muscle](#) and muscle alignment type issues," says Dr. Brent Bauer, a general internal medicine physician at Mayo Clinic.

Mayo Clinic in Rochester, Minnesota, is currently studying the use of Tuina for patients with chronic nonspecific lower back pain.

"If the study turns positive, and we say, 'Yes, Tuina can be a very good treatment for many people with [chronic low back pain](#).' That's half the population, we don't have enough Tuina experts, to even meet half the needs," says Dr. Bauer.

That's where EMMA or robotic massage could help by supplementing

some of the work.

"We want the therapist to do much of the assessment and the positioning, but then the [robot](#) can take over some of the repetitive work."

EMMA's artificial intelligence system uses sensors to measure muscle stiffness and calculate the acupoints in each person's body. Mayo Clinic is hoping to lead the way by conducting clinical evaluations of EMMA.

"So many of our patients do not get full relief or full care if we just limited it to what we have in our conventional toolbox. This is where I love the ability to reach and say, 'Well, we also have acupuncture. We have evidence-based [massage](#). We have, perhaps, Tuina in the near future,'" says Dr. Bauer.

"It's not replacing [conventional medicine](#), it's that idea of augmenting. We're integrating the best of both worlds."

Provided by Mayo Clinic

Citation: Video: Artificial intelligence massage therapy? Meet the robot being studied by Mayo Clinic (2023, March 17) retrieved 18 April 2024 from <https://medicalxpress.com/news/2023-03-video-artificial-intelligence-massage-therapy.html>

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