Knead a massage? 
Ask for Emma the robot masseuse

Patients stepping into NovaHealth Traditional Chinese Medicine (TCM) clinic at One Raffles Place can now expect to be served by Emma the robotic masseuse.

Short for Expert Manipulative Massage Automation, Emma consists of a robotic arm extending from a white machine that is able to dole out back and knee massages. It was officially launched yesterday at the clinic’s opening.

The robot was built by AiTreat, a start-up incubated by Nanyang Technological University, and was in the developmental phase for about two years.

Emma the robot executes massages through soft silicon tips that are warmed to a temperature of between 38 deg C and 40 deg C to mimic human touch.

The type of massage is prescribed by the physician following a consultation, and the robot uses a camera for calibration to accurately target the acupoint. The patient is allowed to vary the massage pressure through a handheld control.

Emma is also equipped with sensors that are able to measure muscle stiffness before and after the massage, providing the physician with empirical data to precisely assess the patient’s condition. Without the robot, NovaHealth physician Calista Lim said she would have to assess muscle stiffness through touch, which is not as precise.

Property agent Ken Tay, who suffers from lower back pain because of the nature of his job, finds the massage by Emma very comfortable.

“It feels like a real person. It is so comfortable, I fell asleep,” the 31-year-old said.

He is not concerned with the lack of human touch. On the contrary, he thinks that having a robot as a masseuse allows him to enjoy peace and quiet during the massage as a robot will not converse with him.

Mr Albert Zhang, founder of AiTreat and NovaHealth, said: “Emma is designed to deliver a clinically precise massage... without the fatigue faced by a human therapist.”

The clinic now employs only one massage therapist apart from Ms Lim, instead of three therapists which it would have employed without Emma the robot. Ms Lim said it costs more than $3,000 monthly to employ a massage therapist.

Mr Zhang said the cost savings allow the clinic to offer more affordable treatment. Treatment consisting of consultation, acupuncture and a 40-minute massage costs $68 at NovaHealth.

The robot cost more than $1 million to develop, although Mr Zhang declined to reveal its manufacturing cost.

Mr Zhang is in talks with local industry players to adopt the robot in their clinics. He is also in discussions with more than 20 organisations that run a total of over 1,000 clinics and hospitals worldwide.

He hopes to adapt the technology for use in chiropractic and physiotherapy.

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