It was just last year that we first heard about Emma – or Expert Manipulative Massage Automation – a robot designed to conduct massage therapy on human patients. At the time, it was undergoing clinical trials. Now, two generations later, Emma 3.0 has entered regular use at a Singapore clinic.

The product of Singaporean startup AiTreat, and developed by Nanyang Technological University graduate Albert Zhang, Emma isn't necessarily intended to replace human massage therapists. Instead, the idea is that as the population ages and therapists' workloads thus increase, the technology will allow them to tend to two patients at once – they'll work on one themselves, while Emma (as instructed by them) will work on another.
Additionally, patients should be able to receive longer massages, as there won't be a problem with anyone's hands getting tired.

The current model is a third more compact than the original version, plus it offers a wider range of massage programs. It utilizes sensors to measure tendon and muscle stiffness, then turns to a cloud-based artificial intelligence system to determine the optimum amount of pressure to apply.

It delivers the therapy via its single arm, that has two silicone tips which mimic the human palm and thumb. According to the university, it "provides a massage that is described by patients as almost indistinguishable from a professional masseuse." It specializes in back and knee massages.

Emma 3.0 began service this Monday, at the NovaHealth Traditional Chinese Medicine clinic in Singapore.

Source: Nanyang Technological University