

Australia uses closed-loop therapy for diabetes treatment in elders

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People in higher age bracket are more at risk of developing life-threatening severe hypoglycaemia compared to younger people with type 1 diabetes

Closed-loop insulin-delivery could be the key to treating older adults with long-duration type 1 diabetes, according to a study that assessed the clinical benefits of the treatment in comparison to sensor-augmented pump therapy.

Led by Dr Sybil McAulay from St Vincent's Hospital and the University of Melbourne in Australia, it is the first randomised, closed-loop clinical trial exclusively involving people aged over 60 with type 1 diabetes.

Closed-loop therapy, also known as an artificial pancreas, is a technology that provides automated insulin dosing to replace lost pancreatic beta-cell function. The therapy was shown to achieve better glucose control among the study participants compared with sensor-augmented pump therapy, which delivers standard manual insulin doses.

"Older age is not a barrier to closed-loop therapy and closed-loop has important clinical benefits, although longer-term effects will need further study," Dr McAuley said.

While previous studies have demonstrated the benefits of closed-loop therapy among children and younger adults with type 1 diabetes, there has been limited research into its effects on older adults.