**Maximising the potential of online diabetes education programs by incorporating high-quality multimedia resources and an adaptive learning pathway**

Online education is a cost-effective way of delivering diabetes education at scale. People with type 2 diabetes (T2D) like the flexibility of “anywhere anytime” of online delivery and often prefer online videos compared with face-to-face delivery. Despite the potential for incorporating high-quality multimedia and interactive learning resources into online programs, many developers have not maximised the multimedia and learning pathway opportunities offered by an online platform. The aim of this research was to create and evaluate an online self-management program for people with T2D.

A qualitative study was conducted to determine the content needs and preferences of people with T2D and health professionals. Design and development of the program was based on the cognitive theory of multimedia learning (CTML) and health education theories that promote self-efficacy and autonomy. The program was created from multimedia: videos, quizzes and interactive learning resources, and was structured to have an adaptive learning pathway.

The program was piloted with 45 self-enrolled participants with and without T2D. Post-course knowledge scores increased by 30% compared with pre-course knowledge scores (p<0.001, n=17). Course engagement data shows that the adaptive learning pathway successfully tailors the course to suit the needs of participants who are guided through the program based on relevance of the content, self-management choices and individual learning.

High-quality multimedia interactive learning resources can be easily incorporated into online education platforms. Online diabetes education programs benefit from design and development that supports autonomy and tailors the program to the individual.