CO-DESIGNING STRATEGIES FOR PREVENTION, DETECTION AND MANAGEMENT OF LIPOHYPERTROPHY IN PEOPLE WITH TYPE 1 DIABETES

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Background
Lipohypertrophy is a common and clinically important adverse effect of insulin therapy, impacting insulin absorption and increasing glucose variability. People with type 1 diabetes (PWD) and healthcare professionals have limited education, support and management strategies to address lipohypertrophy at insulin administration sites. We aimed to identify key issues for PWD and healthcare professionals and priorities for development of a care pathway for lipohypertrophy.

Methods
Ten co-design workshops were conducted (PWD n=7, healthcare professionals n=2, and one combined PWD and healthcare professional workshop) using the Design Thinking framework. Workshops were recorded, transcribed and analysed iteratively using thematic framework analysis and the COM-B model.

Results
Participants included PWD (n = 13) (mean age43 (±14) years, diabetes duration 23 (±13) years) and two specialist healthcare professional teams (n=35). There was convergence of priorities between PWD and health-care professionals in four strategic areas: Education, Communication, Assessment and Practical management tools. PWD prioritised consistent, up-to- date education from diagnosis onwards, with opportunities for peer-led education; empathetic and stigma/blame-free communication; regular assessment for lipohypertrophy, including technology such as ultrasound for preventative care; and practical support for injection or pump site management. Healthcare professionals prioritised evidence-based education to support consistent messaging across care settings; guidance on language and initiating conversations about lipohypertrophy; standardised assessment approaches to detect lipohypertrophy and recording practices; and providing actionable practices to PWD.

Conclusion
Priorities for care identified by PWD and healthcare professionals highlight opportunities for future intervention. These findings will inform the development of an intervention framework to support the prevention, detection and management of lipohypertrophy.