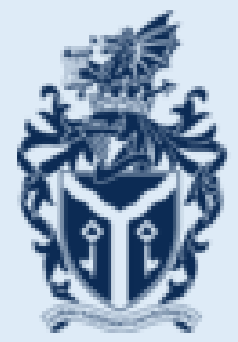


A qualitative, service evaluation exploring user experiences of Diabetes Prevention Programmes in Cwm Taf Morgannwg University Health Board

Authors: Zsofia Szekeres¹, Tahir Touray¹, Francesca Vuolo, Frances Samuel², Megan Elliott², Jane Lewis¹



Cardiff Metropolitan University
Prifysgol Metropolitan Caerdydd

¹ Cardiff School of Sport and Health Sciences, Cardiff Metropolitan University
² Cwm Taf Morgannwg University Health Board
Contact: jealewis@cardiffmet.ac.uk



Background

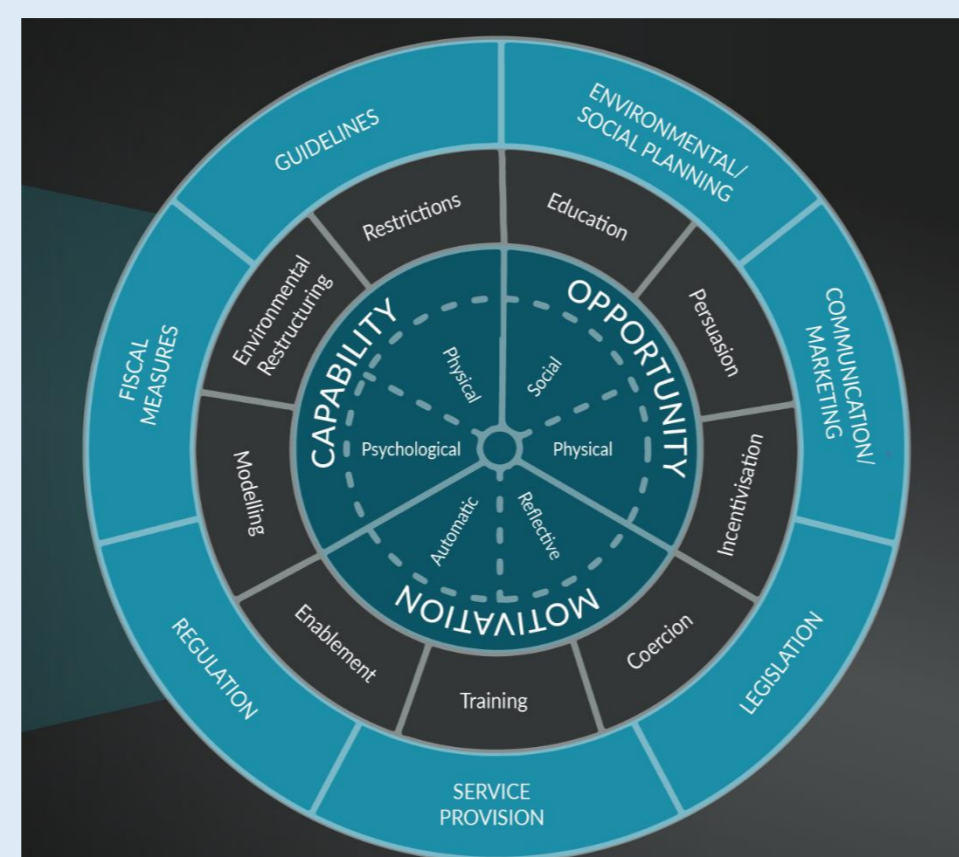
The global burden of diabetes is increasing, necessitating improved surveillance and prevention efforts (1). Evidence supports identifying high-risk individuals and implementing intervention programmes. In Cwm Taf Morgannwg UHB, two diabetes prevention initiatives have been implemented: the All-Wales Diabetes Prevention Programme (AWDPPP) and the WISE Diabetes Prevention Programme, both focusing on brief lifestyle interventions.

Aims

- to review the evidence on diabetes prevention programmes globally
- to evaluate patient experiences in two local initiatives, identifying barriers and facilitators to engagement.

Methods

- Narrative synthesis on current evidence examined determinants, barriers, facilitators, uptake, guidance, and effectiveness of diabetes prevention programmes.
- Qualitative study, using thematic analysis (3) guided by COM-B model (4) assessed patient experiences
- Between Jan-Mar 2024, 28 service users participated in one of the four focus groups or individual interviews (n = 11, online or by telephone).



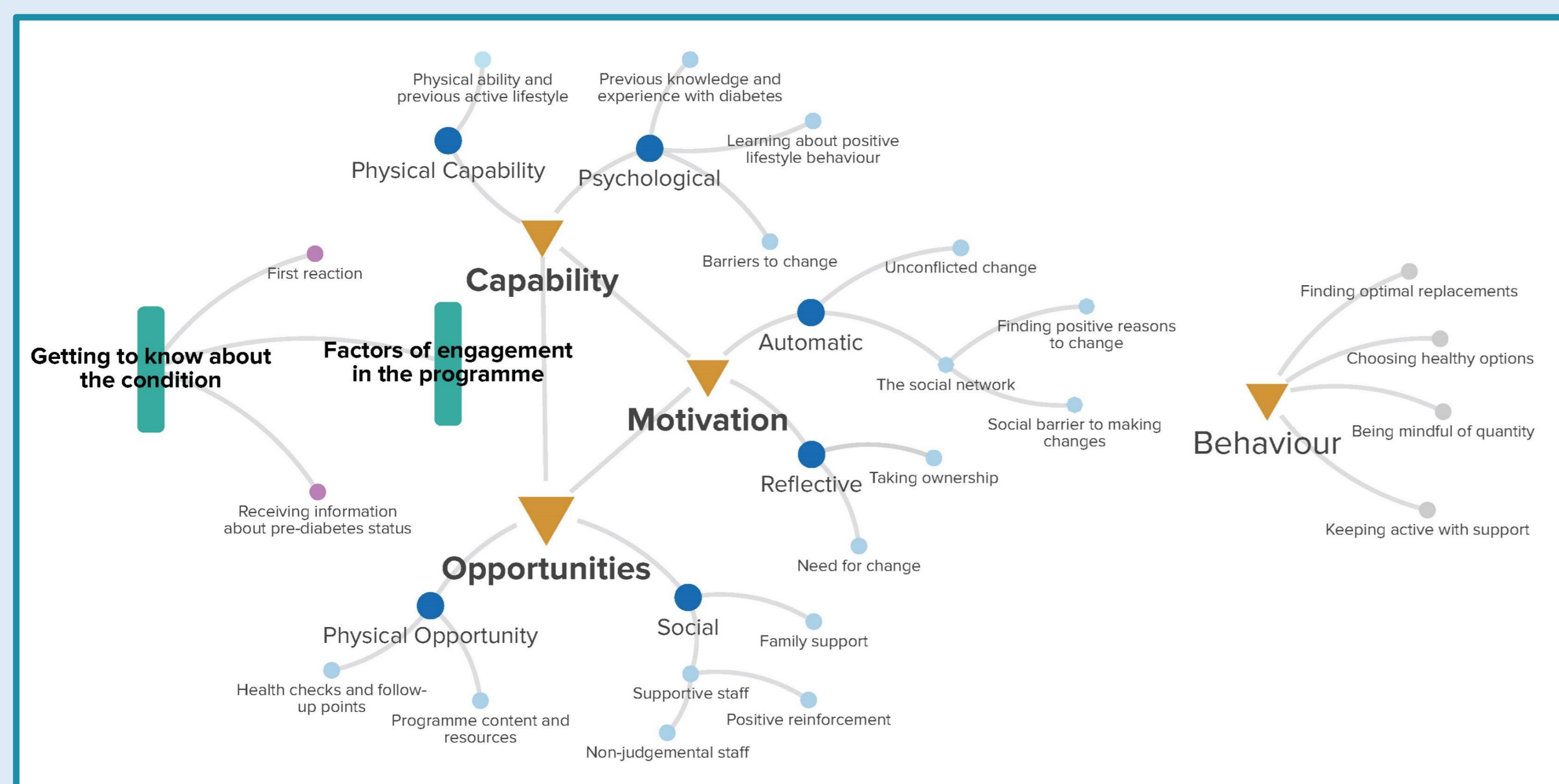
Outcomes/results from narrative synthesis

- Diabetes prevention programs with frequent face-to-face contact, supplemented with online resources produce superior clinical outcomes.
- Trained volunteer mentors help manage costs but implementing QA measures is essential.
- Standardising outcome reporting e.g. Penetration, Implementation, Participation, Effectiveness (PIPE) Matrix Framework (2), for translational programmes can improve consistency, comparability, and accountability across Wales.

PIPE Element	Description	Coding of score
Penetration	1207 patients	>67% High
Implementation	1 x one-to-one, face-to-face 15-30 min consultation 12 months No QA reported.	Low Moderate NAC
Participation	All 1207 participants invited had consultation	High
Effectiveness	HbA1c (mmol/mol) was measured as success -In NCC 36.7% moved from Pre- diabetes to normal glucose tolerance, 60.5% remained as pre-diabetes and 2.9% developed diabetes. In NPT, 62% normal, 36.6% pre- diabetes, and 1% developed diabetes. Estimated reversion to normal 49.5% No weight loss measurement taken.	Effectiveness – success (HbA1c): High Weight loss: NAC Risk reduction: >30% (49.5%) High

Qualitative Findings

The evaluation identified various factors influencing programme engagement and lifestyle changes. Psychological and physical capabilities, social and physical opportunities, and automatic and reflective motivation all played roles. Key elements included prior knowledge, supportive staff, health checks, personalised guidance, risk awareness, and personal responsibility. Findings revealed a complex interplay of factors affecting participant engagement and behaviour change.



supportive staff, health checks, personalised guidance, risk awareness, and personal responsibility. Findings revealed a complex interplay of factors affecting participant engagement and behaviour change.

"I've looked at my lifestyle and I thought, well, I'm not particularly a processed food eater. So we started to look at my lifestyle, and I like to drink in the evening. And I found that initial consultation, um really woke me up."

"My mind was changed completely...I started to lose weight, and started to improve and feel better, and I'm now actually reducing medication I've been on for 20 years because of the improvements. So yes, I think we've [participant and the lifestyle coach] done a cracking job."

"The lifestyle coach was good in a way that he directs because he does it without, you realising it. He's actually influencing me a lot."

"I think it climbed again [blood sugar level]. I need a little push to get it back down or to see if it's going down. If it's done just slightly more often. It's a bit more encouragement.."

Recommendations from the literature and the qualitative findings

Regular contacts (F2F or remotely)
Face-to-face prevention programs with regular contact yield better clinical outcomes.
Provide regular consultations (in-person, online, or by phone) and self-monitoring options (apps or paper) tailored to patient preferences.

Supplementary services and Peer volunteers
Use trained volunteers with lived experience to run sessions (reducing costs). Enhance awareness and referrals to supplementary services (e.g. Foodwise). Enable patients to involve family or friends in service access and lifestyle changes.

Tailored support
Allow flexible access to support outside regular hours for patients with engagement barriers.
Personalised guidance for patients with mental health or chronic conditions.

Monitoring and reporting
Offer six-month blood tests for all patients.
Use consistent outcome reporting, comparable diabetes prevention efforts across Wales.

Quality assurance
Implement quality assurance for equitable, consistent outcomes (e.g. engagement, weight loss, HbA1c) and cost-effectiveness.
Report on the PIPE Framework to support broader adoption of diabetes prevention programmes.

Thanks to all those who participated in the evaluation and to CTM staff who facilitated the data collection.

Acknowledgements and references

- Alliance N. Diabetes Fast Facts 2023 [Available from: https://nodalliance.org/why-ncds/ncds/diabetes?gad_source=1&gclid=EAIaIQobChMI183yWYG_hAMVL45QBh1_IQFyEAAyAAEgLds_D_BwE]
- Aziz Z, Absetz P, Oldroyd J, Pronk NP, Oldenburg B. A systematic review of real-world diabetes prevention programs: learnings from the last 15 years. Implementation science. 2015 Dec;10:1-7.
- Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qualitative research in sport, exercise and health. 2019 Aug 8;11(4):589-97.
- Michie S, Whittington C, Hamoudi Z, Zarnani F, Tober G, West R. Identification of behaviour change techniques to reduce excessive alcohol consumption. Addiction. 2012 Aug;107(8):1431-40.