Enhanced Community Care

DIABETES PREVENTION PROGRAMME

ECC DIETITIANS WORK TO PREVENT TYPE 2 DIABETES

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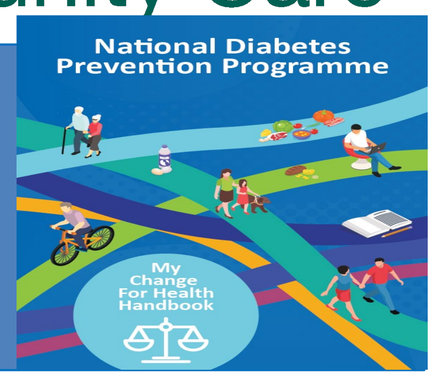

BACKGROUND & AIM

Background: Those with a diagnosis of prediabetes are at high risk of developing type 2 diabetes with up to half of this cohort progressing to type 2 diabetes within 10 years. Given the high burden of disease associated with type 2 diabetes and the associated cardiovascular risk, the need for a diabetes prevention programme for Ireland was evident. International evidence shows that a structured, targeted, behavioural approach to lifestyle change can reduce diabetes risk by up to 60% (Knowler, 2002, 2009).
Aim: To design, develop, pilot and deliver an online National Diabetes Prevention Programme (DPP) for the HSE.

OBJECTIVES

- offer an evidence based lifestyle & clinical intervention to those at highest risk of type 2 diabetes.
- design a programme for delivery by dietitians working in the community specialist teams
- use learnings from the pilot to scale up for national implementation.
- design the programme for delivery online ignited by COVID 19.

INTERVENTION

Right Care-Offered to those at highest risk. Eligible cohort are those with HbA1c 42-47mmol/mol. Curriculum focuses on risk reduction with support on eating, movement, weight and change for health topics. Change for health focuses on health behaviours including sleep, stress, smoking and alcohol. Behaviour change skills including goal setting, self management, empowerment and problem solving are core parts of every session.
Right Place- delivered online thus increasing reach with care delivered in service users own home
Right Time- offers early intervention to those at highest risk identified by GP screening and referral

METHODOLOGY

Designed evidence-based care guidelines These inform the curriculum which is underpinned by a person-centred philosophy of care and has HSE and Sláintecare values at the centre of its design.

Designed curriculum which is evidence based and is delivered in the online setting.
Core pillars of the curriculum include eating for health, movement for health, change for health (focus on planning, self management, goal setting, self monitoring, overcoming barriers),weight for health and other health related topics including sleep, stress, smoking and alcohol.

Person Centred Individualised care Service users receive an individual initial assessment with a personal plan before joining the group setting

Designed robust evaluation process Educators gather quantitative (demographic, attendance and clinical) data. Qualitative data (knowledge, skills, confidence, experience) collected via a self administered online participant survey. Process evaluation included interviews with educators and participants.
Identified pilot sites in 6 CHO areas
Identified and trained dietitian educators
Designed and delivered an **Educator Manual** to support with programme delivery
Designed and delivered a **Participant Handbook** and online resources developed
Pilot Delivered June 2021 – September 2022

73 participants from 6 CHO areas engaged in pilot
47% female, 53 % male
Mean age = 60yrs, Range 35-82 years with 57% ≤ 65yrs

HIGH LEVELS OF ENGAGEMENT

92%	**Attended** least 1 group session
73%	Attendance at the first 6 sessions
72%	**Retention** for at least 50% of sessions
66%	**Completed** Programme (At least 50% attendance and the final session)

Completers – mean attendance 11 sessions (range 7- 14)

POSITIVE CLINICAL IMPROVEMENT

BMI	BMIs in the healthy range increased from 3% to 12% Rate of Obesity Class II decreased from 28% to 15% Rate of Obesity Class III decreased from 16% to 12 % Fig1.1
Weight	Mean weight loss of 3.7% in full cohort at 1 year Mean weight loss of 5.5% at 1 year in those that lost weight 73% had lost weight at 1 year Fig 1.2
HbA1c	Mean reduction in HbA1c of 5.1% (2.3mmol/mol) at 1 year 50% returned to normoglycaemia at 1 year

POSITIVE SERVICE USER EXPERIENCE

KNOWLEDGE	Participants demonstrated increased knowledge of diabetes risk (increased from 39% to 59%), how to eat well (up from 10% to 29%) and knowledge of physical activity needed for health (up from 26% to 35%).
SKILLS	Participants reported improved skills at planning and shopping for healthy food (up from 6% to 35%)
CONFIDENCE	Improved confidence reported for engaging online, making healthy food choices, achieving activity goals and achieving weight goals.
SATISFACTION	95% of the group described course as 'Excellent' or 'Very Good' 90%reported that they found the course very helpful 90% described the support with getting started online as 'Excellent' or 'Very Good'. 70% reported satisfaction with duration of course and sessions

FIG 1.1 BMI kg/m2 Comparison baseline and 1 year

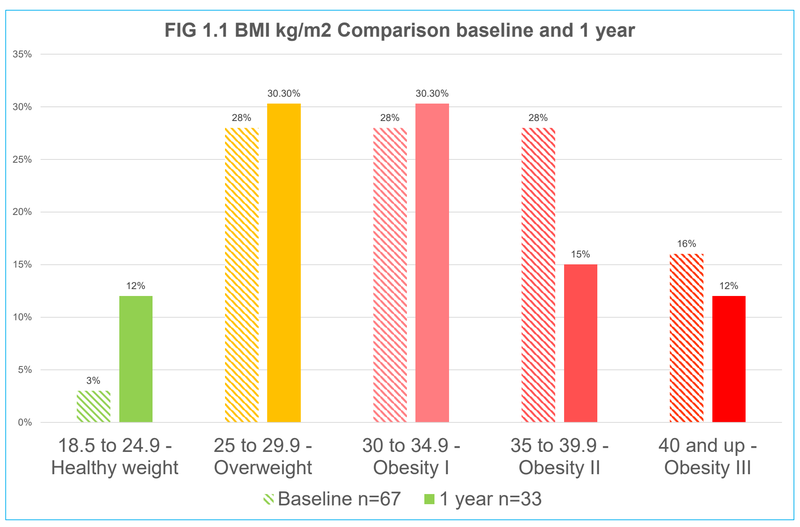

Fig 1.2 Weight Change for those who completed the programme

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N*	Characteristic	Mean	Range
44	Baseline Weight (kg)	97 kg	62 -162 kg
29	1 year weight (kg)	92kg	60 – 141kg
29	Weight change (kg)	3.8kg	-24.5 to +2.2kg
29	Weight change (%)	3.7%	-17.7% to +2.7%
21	Weight change for weight loss group (kg)	5.56kg	-1 to -20.4kg
21	Weight change for weight loss group (%)	5.46%	-1 to -14.1%
6	Weight change for weight gain group (kg)	+1.4kg	+1.1 to + 2.2kg
65	Was weight loss a goal for you?	57 (88%) answered YES	

N* number of individuals data was recorded for

CONCLUSIONS

The DPP online pilot has demonstrated that early intervention can reduce risk and delay the progression to type 2 diabetes in high risk cohorts. 50% of participants have achieved normoglycaemia at 1 year. The programme has demonstrated high levels of engagement, positive clinical improvements and high levels of satisfaction from service users.

RECOMMENDATIONS

All service users at risk of developing type 2 diabetes should be given the opportunity to engage with the National Diabetes Prevention Programme.
Use the learnings from the online pilot to scale up and increase reach in all CHO areas
Adapt the programme for face-to face delivery to improve access where technology may be a barrier to engagement
Ensure that pathways for referral can enable engagement in a timely manner

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[1] Office of Chronic Disease Self-Management Education and Support. [2] Office of National Clinical Advisor and Group Lead for Chronic Disease, HSE Funding via Sláintecare Action Plan 2019.