

# Replication of a new, evidence-based preventative Health Trainer service for people at risk of developing type 2 diabetes

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# Overview

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## Background

- CLAHRC for Greater Manchester
- Type 2 diabetes prevention

## Projects in Bolton and Ashton, Leigh & Wigan

## Project outcomes and observations

# CLAHRC for Greater Manchester

**Collaboration  
for  
Leadership in  
Applied  
Health  
Research and  
Care**

- Greater Manchester
- Birmingham and the Black Country
- Cambridge
- Leeds, York and Bradford
- Leicester, Northamptonshire and Rutland
- NW London
- Nottinghamshire, Derbyshire and Lincolnshire
- South Yorkshire
- Peninsula

Collaboration between a university and its local NHS trusts that will...



Conduct high quality health services research



Ensure knowledge gained from the research is translated into improved health care in the NHS



Build NHS capacity to plan and implement evidence-based improvements

**patient and public involvement**

# Background

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- Not a research study or a RCT
  - No different treatment groups or control group
  - Data used is data routinely gathered in GP surgeries
  - No strict inclusion criteria apart from diagnosis of impaired glucose tolerance (IGT) which was referral criteria
- An implementation project
  - Working with local health economies and health care commissioners and providers
  - Helping to identify, translate and then apply existing research evidence
  - To find a locally adapted solution for type 2 diabetes prevention

# Type 2 diabetes prevention

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- Evidence for prevention of type 2 diabetes through lifestyle change support
- Compelling need for prevention
  - Nationally

# Compelling need for type 2 diabetes prevention

## Health economy

- Diabetes UK estimated that up to 10% of the total NHS budget is spent on diabetes care
- Cost of associated cardiovascular events
- Prevalence of type 2 diabetes expected to rise to 8.6% by 2030

## Additional burden for patients

- Reduced quality of life (disease and related complications)
- Increased risk to suffer from depression
- Reduced life expectancy on average by up to 10 years

- Diabetes UK(2009) Diabetes in the UK 2009: Key statistics on diabetes.

- APHO Diabetes prevalence model available published by the Yorkshire & Humber Public Health Observatory, applying the fact that 90% of diabetes cases are classified as type 2 diabetes

# Type 2 diabetes prevention

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- Evidence for prevention of type 2 diabetes through lifestyle change support
- Compelling need for prevention
  - Nationally
  - Greater Manchester: lack of services available to support lifestyle change for people at risk of developing type 2 diabetes

# Projects in Bolton and Ashton, Leigh & Wigan





# Projects in Bolton and Ashton, Leigh & Wigan (ALW)

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Working with the existing Health Trainer service to develop a diabetes prevention service.

- Health Trainers are based within GP surgeries, with good coverage across the borough
- Service solely focused on lifestyle change/health promotion (CVD risk prevention)
- Skilled in supporting behaviour change and offering personalised motivational support



# Evaluation results: Baseline

Measure	Bolton	ALW
N	80	77
% >55years	85%	87%
% male	53%	57%
Body Mass Index (mean)	31.0kg/m <sup>2</sup>	32.2kg/m <sup>2</sup>
Weight (mean)	87.0kg	89.8kg
Waist circumference (mean)	105.3cm	107.6cm

## Evaluation results: Outcome

Measure	Bolton (Change)	ALW (Change)
N	80	77
Body Mass Index	1.1kg/m <sup>2</sup> (SD 1.5; p<0.001)	0.8kg/m <sup>2</sup> (SD 1.3; p<0.001)
Weight	2.9kg (SD 4.5; p<0.001)	2.2kg (SD 3.5, p<0.001)
% Weightloss (mean)	70 (-4.8kg / -5.1%)	74 (-3.8kg / 4.2%)
Waist circumference	3.1cm (SD 4.8; p<0.001), n=65	2.4cm (SD 4.8; p<0.001), n=60
% Reduction in waist circumference	66 (-5.4cm / -4.9%)	49 (-7.1cm / -6.6%)

# Project outcomes and observations

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- Project results are comparable to published diabetes prevention studies
- Achieved to embed a sustainable and accepted service offering specific support to people at risk of developing type 2 diabetes
- Both projects helped to embed the existing Health Trainer services within primary care and proved its additionality and scope for diversification.
- Indicates this is a spreadable model which can achieve replicable results.

# Project outcomes and observations

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## Key characteristics:

- Co-location in primary care
- Brings limitations at the same time
- Rests on the availability of Health Trainers or similar type of workforce within a health care system
- Parallel efforts needed in identify at risk groups who can then be referred to the Health Trainer service

**Each area is different – local adaptation to take into account contextual differences is key**

# Any questions?

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