

Evaluating the NHS Diabetes Prevention Programme (NHS DPP)

DIPLOMA research programme

**Peter Bower and Sarah Cotterill
University of Manchester**

NIHR Health Services and Delivery Research
01/04/2017 to 31/03/2021 (48 months)



Presentation

- Outline of the research we are doing
- Responses to questions that have been asked
- Opportunity to raise new issues



Broad aims

- Feedback regularly to NHS DPP stakeholders on delivery and outcomes to support development
- Rigorous long-term assessment of effectiveness of NHS DPP in reducing diabetes in a way that is cost-effective and sustainable



Who are we?

- Experienced multidisciplinary team
- Previous evaluations:
 - Whole Systems Demonstrators
 - Advancing Quality
 - Expert Patient Programme
 - DPP demonstrators
- Independent, comprehensive evaluation commissioned by NIHR
- Separate evaluation of digital DPP



Workpackages

- WP 1 Access and equity
- WP 2 Implementation
- WP 3 Service delivery and fidelity
- WP 4 Outcomes
- WP 5 Comparative effectiveness
- WP 6 Validation sample
- WP 7 Comparative long term cost effectiveness
- WP 8 Programme management



WP 1 Access and equity

- Do inequalities exist for:
 - Identification of eligible patients:
 - compare prevalence in those 'at risk' of diabetes from representative surveys with patients identified 'at risk' in DPP
 - Referrals:
 - compare patients referred and not referred
 - Completion (with WP4):
 - compare completion rates
 - Effectiveness (with WP4):
 - compare outcomes



WP 1 Access and equity

- What is the experience of patients and professionals in accessing NHS DPP?
 - Observation of consultations discussing risk
 - Interviews with professionals and patients to explore understanding of risk and decisions about referral
 - Interview eligible patients who have not been referred, and people who have declined



WP 2 Implementation

- To assess implementation of the NHS DPP
- What are the barriers and facilitators to implementation in local areas?
 - longitudinal interviews with designated local leads
- What are the barriers and facilitators to implementation in practices?
 - GP sites to explore identification and referral



WP 3 Service delivery and fidelity

- Do provider programmes (e.g. manuals) map onto NICE/DPP spec?
 - Coding
- Does training of NHS DPP staff address appropriate content?
 - Observing training
- Is the NHS DPP intervention delivered with fidelity?
 - Observing sessions
- Is the content of NHS DPP interventions understood by recipients?
 - Interviewing patients



WP 4 Outcomes

- How well do patients participate in the NHS DPP?
- Does participation vary by service and patient characteristics?
- What outcomes do people achieve in the NHS DPP?
- Do outcomes vary by service and patient characteristics?
 - Analysis of the individual level data collected by providers
 - No comparator group



WP 5 Comparative effectiveness

- To assess whether NHS DPP is more effective than usual care in reducing conversion of non-diabetic hyperglycaemia to diabetes, eventually reducing diabetes prevalence in England
- The roll-out of the programme makes formal RCT problematic
- WP5 uses routine data and statistical techniques to provide a rigorous estimate of the success of the programme in:
 - reducing conversion of non-diabetic hyperglycaemia (incidence)
 - reducing the overall numbers of cases of diabetes (prevalence)



WP 5 Comparative effectiveness

- Leverage UK strength in routine data and local expertise in analysis to assess NHS DPP impact
- Data sources
 - Two primary care databases (CPRD, ResearchOne)
 - GP diabetes registers
 - (National diabetes audit)



WP 7 Comparative long term cost effectiveness

- Drawing together WP findings, use an economic model to explore:
 - What are the short-term benefits of NHS DPP, and the cost consequences of changes in health service utilisation?
 - What are the expected long-term health benefit consequences of NHS DPP, and the expected long-term cost consequences?
 - Is the overall NHS DPP cost-effective compared to usual care?
 - How does equity affect the overall cost effectiveness of NHS DPP?
 - What changes would improve short and long-term cost effectiveness?
- Building on (but not restricted to) the ScHaRR model



Patient and public involvement

- 6 patient and public contributors
- The first 3 PPI meetings have taken place (October 2017, Feb 2018, May 2018)
- Issues discussed so far include:
 - discussions on WP1 qualitative and WP4
 - Development of animation



Your questions



What is covered in the evaluation? Is this a quantitative or qualitative evaluation?

- Mixed methods
- Primary focus is a quantitative assessment of outcomes



Is the user experience being explored as part of the evaluation?

- To a degree
 - WP1 will explore patient experience of access
 - WP3 will explore patient understanding of DPP
 - We will use any experience data collected in DPP



What's the assessment in terms of equity of access?

- We will explore equity through:
 - Interviews with people who do not attend DPP (WP1)
 - Comparing people referred and not-referred (WP1)
 - Analysis of DPP data to explore impact of personal characteristics on attendance and outcomes (WP4)



Which are the sites that are being recruited for the evaluation?

	Footprint name	Region		Footprint name	Region
1	Lancashire & South Cumbria	North	9	Birmingham & Solihull	Midlands and East
2	West Yorkshire	North	10	Milton Keynes, Bedfordshire & Luton	Midlands and East
3	Greater Manchester	North	11	Hertfordshire & West Essex	Midlands and East
4	Cheshire & Merseyside	North	12	North Central London	London
5	South Yorkshire and Bassetlaw	North	13	North East London	London
6	Lincolnshire	Midlands and East	14	Bristol, North Somerset & South Gloucestershire	South
7	Leicester, Leicestershire and Rutland	Midlands and East	15	Gloucestershire	South
8	The Black Country	Midlands and East	16	Buckingham, Oxfordshire & Berkshire West	South



Your questions

What would be the workload involved for those sites involved in the evaluation? And what are the timescales?

- Most analysis is of national data
- Research in local areas will only include:
 - Small number of practices – observations/interviews (WP1)
 - Telephone interviews with DPP leads at 2 points (WP2)
 - A short postal survey about incentives – completed by 1 lead per site, in all 44 sites (WP2)
 - Providers – observation of training sessions and 12 DPP courses, from start to end (WP3)



What are the plans for dissemination of results?

Timescales?

- We will provide timely results to national DPP team
- National DPP team will cascade
- Already provided findings for new framework
 - behaviour change, implementation, blood testing
- Final results on the effect of DPP on health outcomes not expected until 2021



Dissemination...

Forthcoming public engagement animation



Dissemination...

DIPLOMA project page at CLAHRC GM website

<https://www.clahrc-gm.nihr.ac.uk/projects/diploma-evaluation-national-nhs-diabetes-prevention-programme>



Home// Our Work// Diabetes and Pre-Diabetes// **DIPLOMA – Evaluation of the national..**

DIPLOMA – Evaluation of the national NHS Diabetes Prevention Programme

Diabetes Prevention – Long term Multimethod Assessment (DIPLOMA) of the implementation, delivery and outcomes of the 'Healthier You: National Health Service Diabetes Prevention Programme' (NHS DPP)

[Visit our Downloadable Resources section to see our latest activity.](#)

What is the Diabetes Prevention Programme?

The increasing number of people being diagnosed with Type 2 Diabetes Mellitus (T2DM) and at risk of



Dissemination...

Bi-monthly blogs, published at the CLAHRC GM and NIHR websites

How is the NHS Diabetes Prevention Programme being implemented?



- <https://www.clahrc-gm.nihr.ac.uk/news/blog/blog-How-is-the-NHS-Diabetes-Prevention-Programme-being-implemented/>

Working at the Sharp End of an NHS Initiative: Making Sense of GP and Nurse Views on the NHS Diabetes Prevention Programme

HEALTHIER YOU
NHS DIABETES PREVENTION PROGRAMME

- <https://www.clahrc-gm.nihr.ac.uk/news/blog/blog-Working-at-the-Sharp-End-of-an-NHS-Initiative:Making-Sense-of-GP-and-Nurse-Views-on-the-NHS-Diabetes-Prevention-Programme>

NHS Diabetes Prevention Programme – Fair and Equal Access

HEALTHIER YOU
NHS DIABETES PREVENTION PROGRAMME

- <https://www.clahrc-gm.nihr.ac.uk/news/blog/blog-nhs-diabetes-prevention-on-programme-fair-equal-access>



Does the evaluation cover regional analysis, or is it only looking at the national picture?

- Focus is on the national picture
- We can explore context in some WPs, but no regional analyses planned at this point



What are the datasets the evaluation is linking with?

- Diabetes databases
 - National Diabetes Audit
 - DPP Minimum Data Set (collected by providers)
- Two primary care routine databases:
 - Clinical Practice Research Datalink
 - ResearchOne
- National surveys (for comparison):
 - English Longitudinal Survey on Ageing
 - Understanding Society
 - Health Survey for England



Acknowledgements

- This presentation is independent research funded by the National Institute for Health Research (Health Services and Delivery Research, 16/48/07 – Evaluating the NHS Diabetes Prevention Programme (NHS DPP): the DIPLOMA research programme (Diabetes Prevention – Long Term Multimethod Assessment)). The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect those of the NHS, the National Institute for Health Research or the Department of Health.

Contact

- Claudia.Soiland-Reyes@srft.nhs.uk



Many thanks

Any further questions?

