NHS DIABETES PREVENTION PROGRAMME:
Preventing Type 2 Diabetes in England
WHO WE ARE

- **Public Health England (PHE)** is an executive agency of the Department of Health. We protect and improve the nation's health and wellbeing, and reduce health inequalities.

- **NHS England (NHSE)** is an executive non-departmental public body of the Department of Health. Our mission is to secure high quality care for all, and to improve the health outcomes for people in England.

- **Diabetes UK** is the UK's leading diabetes charity. We care for, connect with and campaign on behalf of all people affected by, and at risk of, diabetes, reaching people with diabetes in local communities across the UK.
DIABETES: THE FASTEST GROWING HEALTH ISSUE

Diabetes: state of the nation

2,800,000
The number of people in England with type 2 diabetes

4 million
The number of people that could have diabetes by 2025 (Diabetes UK estimate)

1 in 10 people will have type 2 diabetes by 2034 if current trends persist

RIP 22,000 people with diabetes die early each year

Diabetes is a leading cause of preventable sight loss and is a major contributor to kidney failure, heart attack and stroke

£10bn
the approximate cost of diabetes, 10% of the NHS budget

The risk of diabetes can be reduced significantly by reducing weight and waist size

If current trends persist 70% of people will be overweight or obese by 2034

90%
Percentage of people with diabetes that have type 2, which is largely preventable
THE IMPACT OF DIABETES

Compared to the general population, people with diabetes:

- Have twice the risk of developing a range of cardiovascular diseases
- Are 30 times more likely to have an amputation compared with the general population
- Have reduced life expectancy (an average of 6 years for someone diagnosed with Type 2 diabetes in their 50s)
THE IMPACT OF DIABETES

- Diabetes is the single most common cause of end stage renal disease requiring dialysis or transplant
- Diabetes is the second most common cause of preventable sight loss in people of working age
- Neuropathies (or nerve damage) may affect up to 50 per cent of patients with diabetes
"It took many months before I was issued with a prosthetic and in the meantime I had to cope with a wheelchair...I can tell you at 6ft 3” and pushing 20 stone it wasn’t so easy for me to get around...I spend my whole time looking at the pavement. If you encounter a bit of uneven ground your ankle will compensate but my fixed leg has no give and so if there is any slope I’ll topple over. There’s plenty of times I’ve done my Singing in The Rain impression as I grab onto a lamp post and whirl round to try and stop myself falling.

- Chris
“Everything that happened to me then was a big shock...I realised for my own safety I had to have it [the amputation] done.

When you are a young adult you need to eat properly so you don’t become diabetic in the first place. But once it happens you have to make sure you are aware of what to do and adapt”

- Christine
DIABETES PREVENTION: THE BIG PICTURE

- Primary Prevention
  - Sugar Reduction: Evidence for Action
  - Obesity Work Plan

- Secondary Prevention
  - NHS Diabetes Prevention Programme
  - Retinopathy Screening

- Tertiary Prevention
  - The Management of Adult Diabetes services in the NHS: Progress Review
## OBESITY WORK PLAN: FIVE PILLARS FOR ACTION

Where future generations live in an environment which promotes healthy weight and wellbeing as the norm, and makes it easier for people to choose healthier diets and active lifestyles.

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Description</th>
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| 1. Systems Leadership | • Influence local & national leaders  
• Raise the national debate  
• Influence political ambition  
• Maximize communication |
| 2. Community Engagement | • Enable behaviour change through social marketing  
• Drive social investment through local action  
• Support communities with tools on healthy eating & getting active to help reduce health inequalities |
| 3. Monitoring & Evidence Base | • Enhance surveillance, analysis & signposting of data  
• Tailor evidence to meet local needs – Public Health Outcomes Framework  
• Support effective commissioning & evaluation  
• Develop & communicate research to inform strategy  
• Promote evidence of good practice |
| 4. Supporting Delivery | • Support the obesity care pathway  
• Work with Directors of Public Health & Clinical Commissioning Groups  
• Support commissioning  
• Practical tools to help deliver healthier places; enable active travel |
| 5. Obesogenic Environment | • Develop long term, evidence-based strategy to deliver a whole system approach to tackle the root causes of obesity and address health inequalities |

Tackle obesity, address the inequalities associated with obesity and improve wellbeing
Percentage of newly diagnosed diabetes patients being offered or attending structured education, 2009-10 to 2012-13

In 2012-13, more newly diagnosed diabetes patients were offered or attended structured education programmes than in previous years but fewer than 4% attended the courses.

Percentage offered or attended structured education (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Offered</th>
<th>Attended</th>
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<tbody>
<tr>
<td>2009-10</td>
<td>7.6</td>
<td>2.0</td>
</tr>
<tr>
<td>2010-11</td>
<td>10.4</td>
<td>2.6</td>
</tr>
<tr>
<td>2011-12</td>
<td>11.8</td>
<td>3.1</td>
</tr>
<tr>
<td>2012-13</td>
<td>16.4</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Note
1. Due to issues with data quality, a patient may be recorded as attending structured education without this being recorded as offered to them. The scale of these issues means that the recorded percentage offered underestimates the true percentage offered by about one percentage point.

Source: National Audit Office analysis of National Diabetes Audit data
Percentage of registered patients receiving all the recommended care processes in England, 2009-10 to 2012-13

Performance in the percentage of patients receiving all the care processes has plateaued

Percentage of patients (%)

80% target by March 2018 for the nine care processes

64% target by March 2015 for the nine care processes

Note
1 From 2011-12, the National Diabetes Audit has only reported on eight of the nine care processes. The Health and Social Care Information Centre removed eye screening because it found that data for this measure was not reported consistently.

Source: National Audit Office analysis of National Diabetes Audit data
NHS DIABETES PREVENTION PROGRAMME

• Commitment of the NHS Five Year Forward View
• Joint programme between Public Health England, Diabetes UK and NHS England
• The NHS DPP aims to identify those at risk of Type 2 diabetes early and refer them into evidence-based lifestyle interventions.
• Will be available nationally on roll-out to all adults at risk of Type 2 diabetes with referral routes through:
  • Existing GP Practice registers
  • NHS Health Checks
  • Potential for opportunistic case finding
PROGRAMME DEVELOPMENT

• An Expert Reference Group has reviewed and endorsed the intervention core components

• We have also established a User Involvement Group, in order to ensure the programme takes into account the views of those at risk of Type 2 diabetes
DEMONSTRATOR SITES

We are currently working with seven demonstrator sites, to learn practical lessons from delivery. The demonstrator sites are:

- Birmingham South and Central CCG
- Bradford City CCG
- Durham County Council
- Herefordshire CCG/LA
- Medway CCG/LA
- Salford CCG/LA
- Southwark Council and CCG
EXPECTED BENEFITS: PHE EVIDENCE REVIEW

PHE commissioned an evidence review to assess the effectiveness of ‘real-world’ DPPs:

• 36 included studies
• When compared with usual care:
  – On average, 26% lower incidence of diabetes
  – Average 1.57kg weight loss
• More intensive interventions were more effective
• Following traditional DPP models (such as US / Finnish DPP) more effective
• Differential effectiveness?
  – No difference suggested for age and ethnicity
  – Potentially more effective for women and higher BMI
AN EVIDENCE BASED INTERVENTION

The NHS DPP behavioural intervention will be underpinned by three core goals:

- Weight loss
- Achievement of dietary recommendations
- Achievement of physical activity recommendations

The intervention will be long term, made up of at least 13 sessions, spread across a minimum of 9 months.

Set and achieve goals and make positive changes to their lifestyle.

Sessions will be delivered predominantly in groups and will be ‘face-to-face’ unless there is a strong rationale for an alternative approach.
**NDPP Pathway**

**COLOUR CODING:**
- Orange: relies on existing system (NHS Health Check or General Practice)
- Purple: process TBC
- Blue: Provider responsibility

**Existing Blood Score – Non-diabetic hyperglycaemia**

**HbA1c** 42-47mmol/mol (6.0%-6.4%)

**FPG** 5.5-6.9mmol/l

**Referral for behavioural intervention**

**Assessment with provider**

Repeat HbA1c (or FPG) test

Weight and height taken

Risk factor discussion

**IF:**

i) HbA1c in NDH range

ii) Accept place on programme

**IF:**

i) HbA1c in NDH range

ii) Refuse place on programme

**Possible type 2 diabetes**

HbA1c ≥ 47mmol (6.5%)

FPG ≥ 7mmol/l

**Signpost to NHS choices**

**Second blood test**

**No diabetes**

**Diabetes**

**Referral to GP – treat according to NICE guidance**

**Annual assessment of weight and HbA1c (or FPG)**

Inform GP

**IF: Risk not modified**

**Post-intervention Assessment**

**IF: Risk modified**

**Annual assessment of risk factors? WHO??**

**Possible type 2 diabetes**

**HbA1c ≥ 47mmol (6.5%)**

**FPG ≥ 7mmol/l**

**Signpost to NHS choices**

**Second blood test**

**No diabetes**

**Diabetes**

**Referral to GP – treat according to NICE guidance**

**High-risk groups**

i) Age 25-39 of South Asian, Chinese, African-Caribbean, black African & other high risk black and minority ethnic groups AND BMI ≥ 23

ii) Certain existing conditions that increase risk of diabetes [polycystic ovary syndrome, history of gestational diabetes, schizophrenia]
NATIONAL PROCUREMENT

• A national procurement for the behavioural intervention will allow us to more rapidly roll-out and scale up the NHS DPP, maintaining fidelity to the evidence base
• A Prior Information Notice (PIN) for the procurement was published in March
• We consulted on proposed service model and procurement approach feedback through a Consultation Guide
• Invitation to Tender (ITT) later this year
• We are currently reviewing responses and will be publishing a high level summary report in due course
FIRST WAVE SITES

- We have recently issued a call for expressions of interest for CCG and Local Authority partnerships
- This will involve partnering with our contracted providers
- The call for first wave sites closed on 18th September
- We received high levels of interest from across England
- We will be communicating further information with all sites in due course
TIMELINE FOR NEXT STEPS

2015/16
• Identify areas for first wave of national roll-out
• Implement and evaluate demonstrator plans, feeding learning into national programme
• National procurement of provider(s) to deliver behaviour intervention

2016/17
• Deliver between 10,000 and 30,000 interventions across CCGs identified through expression of interest exercise

2017/18
• Aim to deliver long-term contracts providing incremental scaling up of services, with a view to full coverage by 2018/17 (subject to final decisions about the pace of the programme).
KEEPING IN TOUCH

• We’re keen to involve range of stakeholders, providers and partners in developing and delivering the programme
• For more info and to sign up to our regular e-bulletin https://www.england.nhs.uk/ndpp
• For any questions email: diabetesprevention@phe.gov.uk