Audit of the Prevention of Diabetes through NHS Health Checks 2011-2013

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Public Health – Education, Care and Health
London Borough of Bromley

NHS HEALTH CHECK
Helping you prevent
diabetes
heart disease
kidney disease
stroke & dementia

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Aim:

To ensure patients identified at increased risk of diabetes at the NHS Health Check receive appropriate assessment and management.

Objectives:

1. To develop audit standards to assess the quality of current services in identifying patients at high risk of diabetes.
2. To assess current practices in Bromley against these standards.

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NHS Health Checks Diabetes Filter

Body Mass Index ≥ 30 (or ≥ 27.5 if South Asian or Chinese)

Blood Pressure ≥ 140 mmHg Systolic and/or ≥ 90 mmHg Diastolic

South London NHS Health Checks Diabetes Filter Pathway

- Identification of risk
- Provision of intensive lifestyle programme
- Review

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Audit Standards

Standard 1:
If the individual has a Body Mass Index ≥ 30 (or ≥ 27.5 if South Asian or Chinese Population) or Blood Pressure ≥ 140 mmHg Systolic and/or ≥ 90 mmHg Diastolic, an HbA1c test or fasting plasma glucose (FPG) is required

Standard 2:
If patients have a raised HbA1c ≥42 - <48 mmols/mol (6.0-6.4%) or FPG ≥5.5 - ≤6.9 mmol/l , they should have had a repeat blood test for HbA1c or Fasting Blood glucose within 2 years of the NHS Health Check.

Standard 3:
If patients have a raised HbA1c of ≥42 - <48 mmols/mol (6.0-6.4%) or FPG ≥5.5 - ≤6.9 mmol/l they should be coded with an appropriate READ code indicating level of risk of diabetes and/or diagnostic code of pre diabetic state e.g. Impaired Fasting Glycaemia.

Standard 4:
If patients have a raised HbA1c of ≥42 - <48 mmols/mol (6.0 – 6.4%) or FPG ≥ 5.5 - ≤6.9 mmol/l, they should receive **intensive** lifestyle intervention (this will be measured by assessment of number of consultations for lifestyle intervention and any referrals to exercise programme, weight management, dietician, smoking cessation.)

Standard 5:
Patient identified as high risk of diabetes should have improved risk factor profiles at 1-2 years:
Increased physical activity GPPAQ.
Weight loss been achieved and maintained.
Waist circumference reduced and maintained.
Repeated Blood test 1-2 yearly.

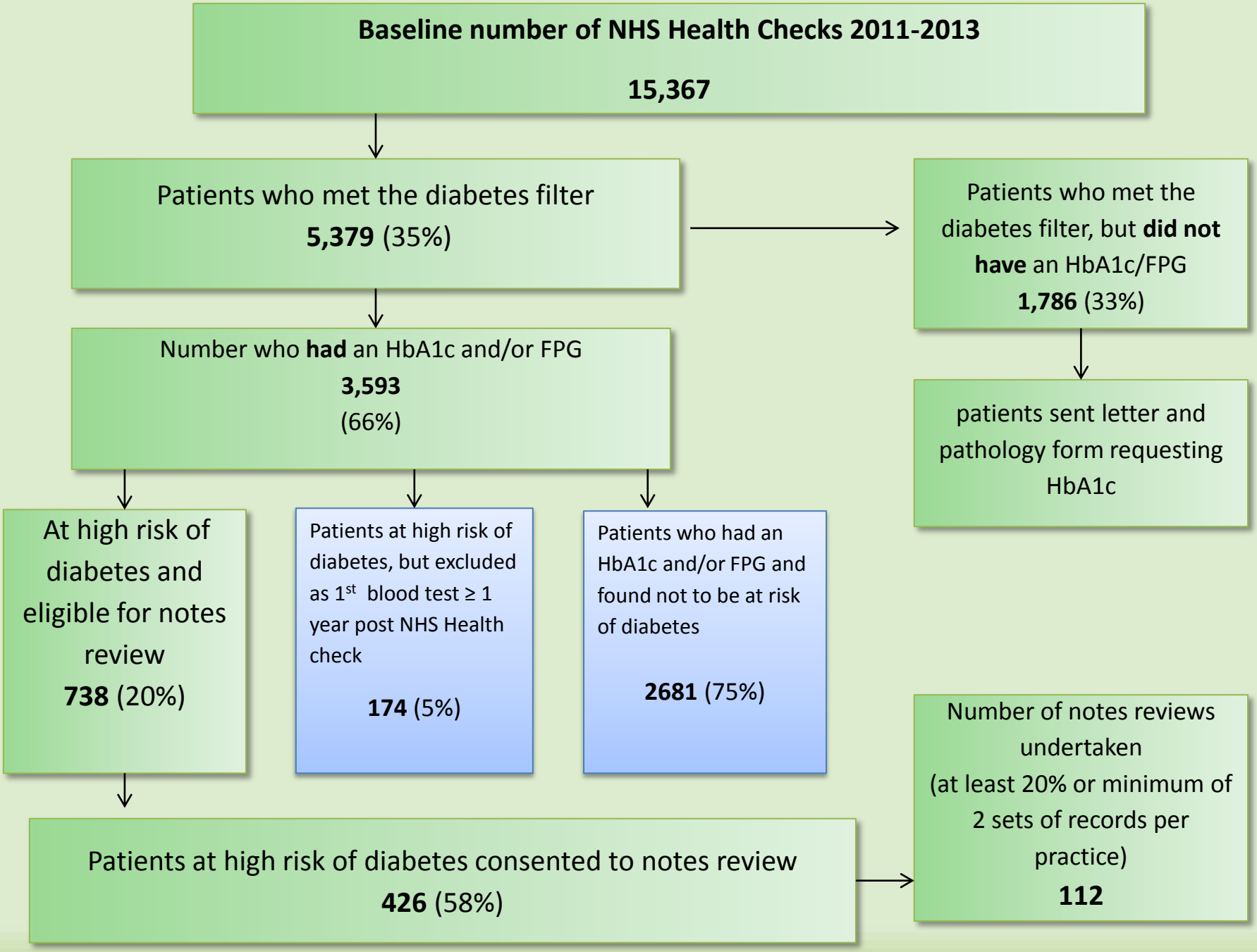
Audit Standards

If the Diabetes Filter was met –

1. Did they have a blood test to assess for diabetes risk ?

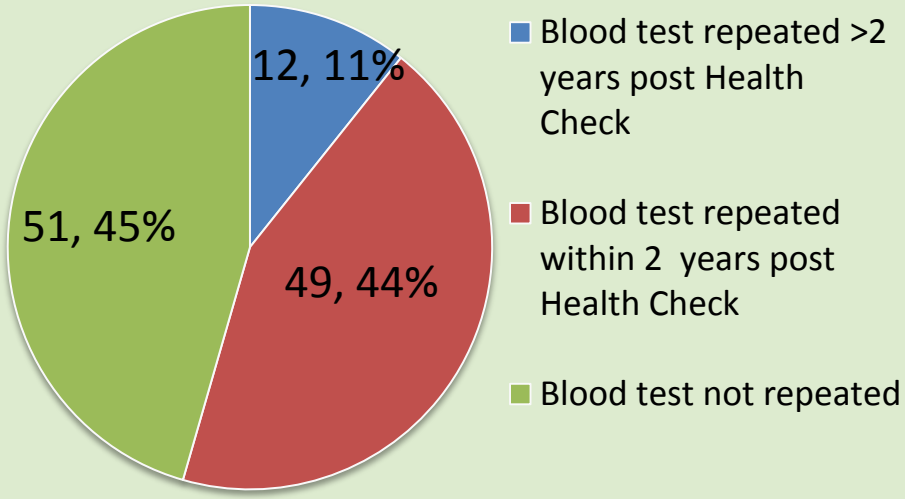
If found to be at high risk of diabetes - HbA1c ≥42 - <48 mmols/mol (6.0 - 6.4%) or FPG ≥5.5 - ≤6.9 mmol/l

2. Did they have a repeat blood test within 2 years ?
3. Did they have a READ code indicating high risk of diabetes ?
4. Did they receive any lifestyle interventions ?
5. Did their risk factor profile improve within 1-2 years ?


Baseline number of NHS Health Checks 2011-2013
15,367
Patients who met the diabetes filter
5,379 (35%)
Patients who met the diabetes filter, but did not have an HbA1c/FPG
1,786 (33%)
Number who had an HbA1c and/or FPG
3,593
(66%)
patients sent letter and pathology form requesting HbA1c
At high risk of diabetes and eligible for notes review
738 (20%)
Patients at high risk of diabetes, but excluded as 1st blood test ≥ 1 year post NHS Health check
174 (5%)
Patients who had an HbA1c and/or FPG and found not to be at risk of diabetes
2681 (75%)
Patients at high risk of diabetes consented to notes review
426 (58%)
Number of notes reviews undertaken
(at least 20% or minimum of 2 sets of records per practice)
112

Results (n=112)

Standard 2 – Repeat Blood Results



→ 9 (18%) patients had improved blood results and were no longer in the pre-diabetes risk group

Standard 3 - READ codes

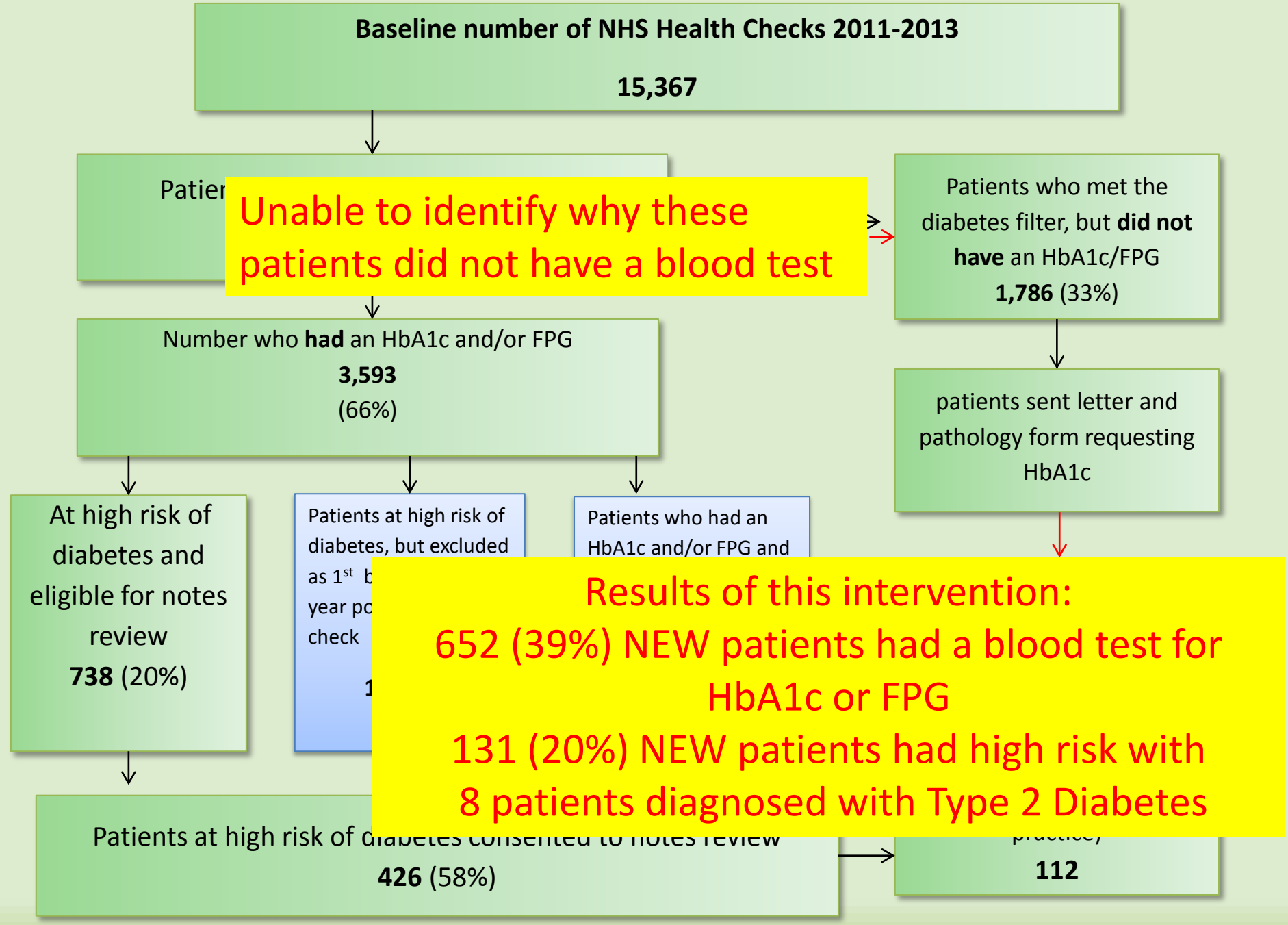
13 (11%) patients had a READ code linked with high risk of diabetes.

1 patient subsequently diagnosed with Type 2 Diabetes.

Waist Circumference (WC)	
91 out of 112 (81%) recorded **at** health check	33 women (90%) WC ≥ 80cms
	52 men (89%) WC ≥94 cms or ≥85 cms if South Asian/Chinese
7 out of 91 (8%) recorded **post** health check	4 patients had a reduction in WC, but remained in 'high risk' group

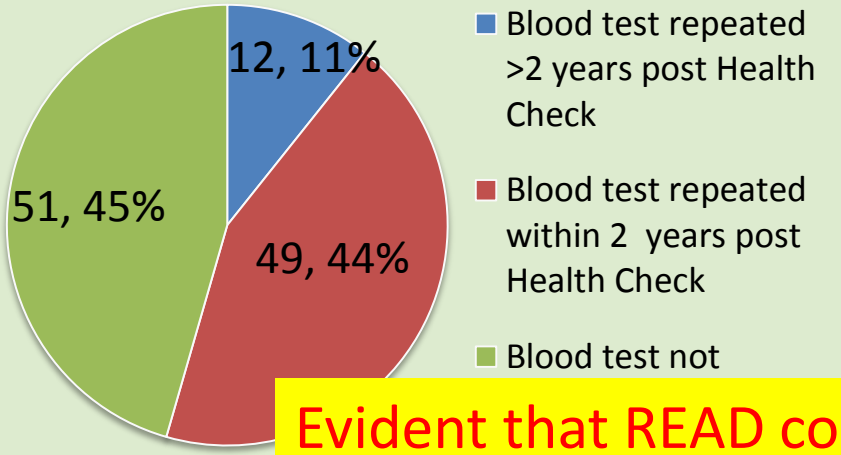
BMI	
110 out of 112 (98%) recorded **at** health check	BMI > 25 = 102 (92%)
	BMI >30 = 72 (65%)
Weight management discussed	62 (56%) patients
Weight management referral (lite4life)	10 (14%) patients
Attended weight management	3 patients
59 out of 112 (53%) recorded **post** health check	34 (58%) patients had a reduction in BMI 2 patients reduced their BMI <25

GPPAQ	
102 out of 112 (91%) recorded **at** health check	60 patients (58%) Moderately Inactive or Inactive
Physical activity discussed	87 (77%) patients
Referred to physical activity programme	3 (3%) patients
Attended physical activity programme	1
17 out of 112 (16%) recorded **post** health check	6 (32%) patients had in improvement in GPPAQ


Baseline number of NHS Health Checks 2011-2013
15,367
Patien
Unable to identify why these patients did not have a blood test
Patients who met the diabetes filter, but **did not have** an HbA1c/FPG
1,786 (33%)
Number who **had** an HbA1c and/or FPG
3,593
(66%)
patients sent letter and pathology form requesting HbA1c
At high risk of diabetes and eligible for notes review
738 (20%)
Patients at high risk of diabetes, but excluded as 1st b
year po
check
Patients who had an HbA1c and/or FPG and
Results of this intervention:
652 (39%) NEW patients had a blood test for HbA1c or FPG
131 (20%) NEW patients had high risk with
8 patients diagnosed with Type 2 Diabetes
Patients at high risk of diabetes consented to notes review
426 (58%)
112

Results of the comprehensive notes review (n=112)

Standard 2 – Repeat Blood Results



→ 9 (18%) patients had improved blood results and were no longer in the pre-diabetes risk group

Evident that READ coding not being used routinely or systematically.
Multiple READ codes available

Standard 3 - RI

13 (11%) patients had a READ code linked with high risk of diabetes.

1 patient subsequently diagnosed with Type 2 Diabetes.

Waist Circumference (WC)	
91 out of 112 (81%) recorded at time of health check	33 women (90%) WC ≥ 80cms
7 out of 91 (8%) recorded post health check	4 patients had a reduction in WC, but remained in 'high risk' group

No specific diabetes prevention programme available at this time

BMI	
110 out of 112 (98%) recorded at health check	BMI > 25 = 102 (92%) BMI >30 = 72 (65%)
Weight management discussed	62 (56%) patients
Weight ma	
Attended weight management	3 patients
59 out of 112 (53%) recorded following health check	34 (58%) patients had a reduction in BMI 2 patients reduced their BMI <25

Some examples of improved risk factor profiles

Difficult to analyse due to lack of documentation

GPPA	
102 o	e
Physical activity discussed	87 (77%) patients
Referred to physical activity programme	3 (3%) patients
Attended physical activity programme	1
19 out of 112 (16%) recorded following health check	6 (32%) patients had in improvement in GPPAQ

No systematic follow up and reassessment of risk factors

Recommendations for service improvement

1.	Education to providers on: • Importance of identification and management of people at high risk of diabetes • Pathway • Use of READ coding • Promoting behaviour change through motivational interviewing techniques • Documentation and coding of lifestyle interventions and referrals
2.	Improvements to coding, templates and searches in the GP Practice computer system
3.	Using commissioning to improve performance - POCT testing for HbA1c by Alternative Providers - Service specification requirement to measure diabetes filter
4.	Joint working to promote and facilitate best practice
5.	Re-audit to see if improvements have been made using amended computer searches

Where are we now?

- Point of Care Testing for HbA1c
- Education events
- Improvements to computer template and searches
- Diabetes filter criteria linked to payment
- Priority for Health and Wellbeing Board

- Re-audit – March 2016

Current Diabetes Prevention Programmes

Weight Watchers Diabetes Prevention Programme:

1 year intensive lifestyle support

- Patient Identified as 'at risk' of developing diabetes.
- Out of 166 referrals, 132 patients attended a welcome session (80%)

6 months outcome data 91/132 to date :

85% reduced risk

52 patients no longer at risk (57%)
25 patients have reduced risk (28%)
3 patients risk stayed the same (3%)
11 patients have increased risk (12%)

Walking Away from Diabetes Programme:

3 hour intervention

- Patient Identified as 'at risk' of developing diabetes.
- 407 completed intervention 201/16

12 month outcome data 106/407 to date:

74% reduced risk

45 patients no longer at risk (42%)
34 patients have reduced risk (32%)
22 patients risk stayed the same (21%)
5 patients have increased risk (5%)

Bromley will be part of the South London bid delivering the National Diabetes Prevention Programme

Summary

Aim:
To ensure patients identified as at increase risk of diabetes at the NHS Health Check receive appropriate assessment and management.

Objective:

1. To develop audit standards to assess the quality of current services in identifying patients at high risk of diabetes.
2. To assess current practices in Bromley against these standards using computer searches and comprehensive notes review.

Findings:

Some examples of good practice and improvements in risk factor profiles.

Intervention of those missed patients worthwhile, identifying further high risk patients

Gaps in documentation - difficult to analyse, variation in practice

Recommendations for service improvement implemented:

Education, Documentation, Commissioning, Joint working,

Improved accessibility to diabetes prevention programmes,

Re-Audit – in March 2016 using amended computer searches.

To look at all filters of the NHS Health Checks

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