NHS
Stoke on Trent

Primary care toolkit

Contents

Section 1
What is the primary prevention programme?
What is the Lifestyle Support Programme?
Who are the lifestyle coaches?

Section 2
Contact details for the lifestyle support team

Section 3
Oberoi software tool
Step by step guide to using Oberoi

Section 4
Inviting patients to attend the programme
Protocol for inviting patients
Cardiovascular screening flowchart
Invitation letter
Reminder letter
Patient information leaflets to be included with letters
Why should I attend this health check?
What to expect at your health check appointment
How to arrange fasting blood test.

Section 5
Protocols
Primary prevention protocol
Template user guide

NHS
Stoke on Trent

Section 6

Referral to lifestyle coach
Guidance for practice staff
Inclusion criteria
Referral form
Patient information leaflets to be given on completion of health check
Clinical results
Your consultation with the lifestyle coach
Copy of signed referral letter
Who should be treated to reduce CVD risk?
Cholesterol information leaflet if required

Section 7

NICE guidelines
Lipid management
Diabetes management
Obesity care pathway

Section 8

Local enhanced service agreements

Section 9

Case scenarios

Section 10

Randomised control trial

Section 11

Additional informtion

What is the primary prevention programme?

NHS Stoke on Trent has introduced a cardiovascular risk reduction programme that is being rolled out across the City during 2008/11.

Stoke on Trent has a significantly high incidence of cardiovascular disease (CVD), diabetes and obesity, all of which are influenced by associated lifestyle factors.

This toolkit has been developed to help you identify, support and meet the needs of patients who are at an increased risk of CVD, developing or have already been diagnosed with CVD or diabetes and those who have completed a cardiac rehabilitation programme. The Lifestyle Support Programme offers timely interventions to aid reduction in developing and/or the progression of these diseases.

Key elements of the Lifestyle Support Programme include:

- CVD risk assessment
- Primary prevention management and support
- An opportunity for patients to attend regular reviews that will help to manage their CVD risk in the long term
- Signposting 'well motivated' patients to the lifestyle programme for up to 12 months ongoing support
- Provide personalised support for patients via a team of lifestyle coaches

Primary prevention of cardiovascular disease

Oberoi software has been installed in each practice which provides practices with the opportunity to identify patients at high risk of developing CVD. Having identified those at risk, members of the primary prevention team (or general practice team) will invite patients to attend an appointment to validate the Oberoi findings. This appointment will be used to develop a patient's care plan which includes updating the primary prevention template, estimating the CVD risk, appropriate prescribing in line with the CVD risk, planned review appointments, and referral into the Lifestyle Support Programme if the patient is motivated to make sustainable lifestyle changes.

What is the Lifestyle Support Programme?

The Lifestyle Support Programme (LSP) offers those who meet the inclusion criteria the opportunity to receive at least 6 months of personalized lifestyle support.

The LSP will offer a one to one consultation with a lifestyle coach, the opportunity to discuss, develop and negotiate a personalised health improvement plan based on lifestyle improvement priorities identified by the patient.

An assigned lifestyle coach will offer a maximum of six hours support per person over a six month period with set review meetings during this time, and a final review at 12 months.

- Each person will be able to develop their own personal health improvement plan based on their identified goals. They will have the opportunity to access a selection of activities designed to help them in their lifestyle changes. These are:
- Physical activity sessions (free 20 week programme)
- Weight management support (free Weight Watchers vouchers)
- Cook 'n' eat educational and practical sessions
- Access to smoking cessation support.

Who are the lifestyle coaches?

Part of the 'Choosing Health' recommendations (DH 2004) to Primary Care Trusts was the development of a National Health Trainer role to work in local communities.

NHS Stoke on Trent developed the Lifestyle Support Programme and the lifestyle coach role from the national picture, tailoring it to meet the needs of local communities. The lifestyle coaches are a qualified team of people recruited from local communities to provide support for people making lifestyle changes. As well as specific training for the role, the lifestyle coaches also bring their varied knowledge, skills and life experience to the Lifestyle Support Programme.

Following referral from primary prevention risk screening to the Lifestyle Support Programme (LSP), each client will be assigned a personal lifestyle coach.

The lifestyle coaches are able to provide accurate and clear information to patients (and colleagues), and support each patient through a process of lifestyle change(s).

Initially there will be a 45 - 60 minute meeting to identify the lifestyle changes that the person/ patient would like to make. At this meeting a personal health plan will be developed and, if it is appropriate at this point, the lifestyle coach may signpost a patient to an additional activity that is suitable for their need(s).

Subsequent contact may be face to face, by telephone or text messaging, whichever is the client's preferred method. 'Milestone reviews' at 3 and 6 months will be face to face meetings.

Flexibility is a key feature of the lifestyle support team ensuring patients can see a lifestyle coach at a time and venue to suit them.

Information and data will be accurately recorded for monitoring and evaluation purposes and feedback will be given to all referring practices.

The lifestyle support team is based at Bentilee Neighbourhood Centre, and works across the NHS Stoke on Trent area in accessible locations.

NHS
Stoke on Trent

Contact details for the Lifestyle Support Programme

Professional leads for primary prevention

Yvonne Mawby yvonne.mawby@stoke.nhs.uk
Linda Picariello linda.picariello@stoke.nhs.uk

Heron House
120 Grove Rd
Fenton
ST4 4LX
Tel 01782 298175

Project support workers

Karen Hales karen.hales@stoke.nhs.uk
Tracy Pepper tracy.pepper@stoke.nhs.uk
Joanne Fynn joanne.fynn@stoke.nhs.uk
Heron House Tel 01782 298175

Please contact us if you have any queries regarding the primary prevention programme in your practice.

Lifestyle Support Service Manager

Marion Beloe marion.beloe@stoke.nhs.uk
Bentilee Neighbourhood Centre
Dawlish Drive
Bentilee
Stoke on Trent
ST2 OEU

Tel. 01782 231372
Fax: 01782 231881
Mobile: 07515 190463

Safe haven fax number for receiving referral letters 01782 298054

Marion will be able to facilitate contact with the city wide lifestyle coach team.

NHS
Stoke on Trent

Professional manager Lifestyle Support Programme
Chris Leese chris.leese@stoke.nhs.uk
Heron House Tel: 01782 298177

Deputy Director of Public Health
Dr Zafar Iqbal zafar.iqbal@stoke.nhs.uk
Heron House Tel 01782 298146

Clinical champion
Dr Ruth Chambers ruth.chambers@northstaffs.nhs.uk

IT project support worker
Danish Jafri syed.jafri@stoke.nhs.uk
Herbert Minton Building Tel 01782 298213

Administrator –Lifestyle Support Programme
Donna Bailey donna.bailey@stoke.nhs.uk
Heron House Tel. 01782 298053

Oberoi Training

Step by step guide

Oberoi software has been installed in all practices that are participating in the Lifestyle Support Programme. Its prime function is to identify patients most at risk of CVD. Oberoi uses data extracted from the practice's clinical system and 'estimates' values that have not been recorded in the medical record to enable the user to invite patients in for screening

To access the software, double click on to the Oberoi icon on the computer desktop.

Username: oco
Password: prevention

In order for Oberoi to work effectively, queries have been developed to run in conjunction with the practice's clinical system. The queries should be run fortnightly to ensure that the data held is up-to-date, accurate and relevant.

You can check when the data was last run by looking at the pale blue bar above the patient details – the date it was last run will appear on the right hand side (i.e. analysed on Monday 18th Feb 2008).

To run the queries, click onto the yellow cog – when you hover over this icon it states 'analyse clinical data'.

A blank data analysis window will open – click onto the analyse button.

Queries can take anything from 5 minutes to 1 hour 30 minutes to run.

Important Note – If Oberoi is installed on more than one computer the responses will only appear on the machine used to run the queries.

You can continue to use the clinical system whilst the queries are being run.

Oberoi will indicate when the queries are complete. Click onto the 'close' button to take you back to the software. You can now browse updated patient details. You will see that the date that the analysis took place is viewable in the pale blue bar (as previously stated).

Definitions within Oberoi

ID – Is the number the clinical system has given to identify the patient

Diagnosed? – Y/N identifies whether the patient already has CHD

Hypertensive? – Y/N identifies whether the patient already has hypertension

Estimated? – Has the patient's CVD/CHD risk been estimated? If these items of information are missing Oberoi will estimate a value.

On Register – Only patients who have had a Framingham risk recorded in their records will have data recorded in this column. It will not state the %, just whether it has been done and the date it was entered.

Patients who should be invited for primary prevention screening in the first instance will be those with ≥ 25% risk.

The column you need to select to pick up this value is CHD x 4/3.
To sort the risk in descending order click once on the grey column CHD x 4/3.

Points to Note

All of the risks are colour coded within 3 thresholds
≥ 20.1% will be shown in red.
Between 10.1% and <20.0% will be shown in yellow
10% or less will be green
Blank columns have no values recorded.

- The latest BP will be shown in red if systolic is greater than 140mmHg or the diastolic is greater than 90mmHg.
- Latest HDL anything less than 1.0 will be shown in red. You can also see the date when this was last recorded.
- Latest total cholesterol – anything greater than 5.0 mmol/L will be shown in red. You can also see the date when this was last recorded.
- Family history, a dash (–) indicates that a family history has never been recorded. 'No' means that the patient has no family history.

- Oberoi will enable you to show the patient their CVD risk factors by providing a risk calculator reading. When accessing this function (F4) please ensure that you scroll along the values at the bottom of the screen so that the patient identifiable information (i.e. other patient names) remain out of sight.

How to use the Function keys (F1, F2, etc.)

F1 no current function
F2 (settings) shows the Read codes that sit behind the calculations
F3 (configure risks) -This information is based on ethnicity and family history. *This function should not be tampered with.*
F4 (risk calculator) - Real time analysis of a patient's current risk.
F5 (view undiagnosed) – Identifies all patients who do not have a recording of CHD in their medical record.
F6 (view hypertension) - Identifies patients with a diagnosis of hypertension.
F7 (view diagnosed) - Identifies patients with a diagnosis of CHD.
F8 (view all) - Allows you to view all patients without taking into account any risks.
F9 (patient details) - For this function to work you need to have the patient identified. i.e. the patient's name should be highlighted in blue. You will be able to look at the patients' risk factors in detail.
F10 (view notes) - This function only works when you are logged onto the clinical system. Highlight a patient and then click on to 'view notes', you will be directed straight to the patient's record in the clinical system.
F11 (Excel) - This function enables you to export the information held on Oberoi into Excel.
F12 (add CVD risk)- By selecting this function you would be adding a risk factor and value to the patient's medical record – *For EMIS this is not recommended.*

Inviting patients for screening

- Once Oberoi has been updated (by running the queries),it is recommended that you send approx 80 invitation letters per month to create an estimated response rate of 20 patients per month who will attend screening.
- The person responsible within the practice for sending out the invite letters should include information leaflets and blood cards with correspondence.
- This activity must be recorded on the primary prevention CVD risk template that has been installed on to the clinical system.
- Subsequent letters (2nd invite, 3rd invite) should be sent at monthly intervals and recorded on the template as previously indicated.
- When an appointment has been made to see the patient in practice, the primary prevention CVD risk template should be used – please refer to the template user guide.

Protocol for inviting patients to attend the programme

Initial invitation

- At the beginning of each month (set a regular date) perform a search on your practice computer using the Oberoi software to identify patients who have a CVD risk score ≥ 25% in the next 10 years.
- Select number of agreed patients to invite each month e.g. 80 letters will need to be sent in order to generate approximately 20 patients per month.
- Check each patient's clinical notes. If blood test has not been performed in the last 12 months please arrange a blood test to include:

Urea and electrolytes
Fasting total cholesterol /HDL
Liver function
Fasting glucose
Thyroid function
Estimated glomerular filtration rate (EGfR) if on hypertension register

- Send an invitation letter and 'what to expect' information sheet to identified patients (include path lab form and fasting instructions if blood tests required.)
- Record on the 'primary prevention' template that a letter has been sent and if bloods were requested.
- If the patient does not attend an arranged clinic appointment please record 'Did not attend' (primary prevention clinic) on the template and send out the second invitation letter.
- Clinical staff should use the patient diary to enter the next due date for recall.

On completion of initial health check appointment the patient should be offered the following, to support lifestyle changes.

A copy of clinical findings
A copy of motivation score
A copy of referral letter with their signed consent to lifestyle coach (if agreed)
A referral to smoking cessation (if agreed)
A follow up appointment if required

On completion of clinic appointment the patient records should have:

- *Primary prevention template completed.*
- *Diary date entry for primary prevention follow up. If referred to lifestyle coach a repeat appointment at 12 and 24 months is required to comply with the local enhanced service (LES) agreement.*
- *Diary dates for follow up of repeat blood pressure, medication titration, blood tests, smoking cessation as appropriate and per practice policies.*

If the patient has not booked an appointment or did not attend.

- *Ideally telephone to make another appointment.*
- *Confirm appointment by sending appointment card and 'what to expect' patient information leaflet.*

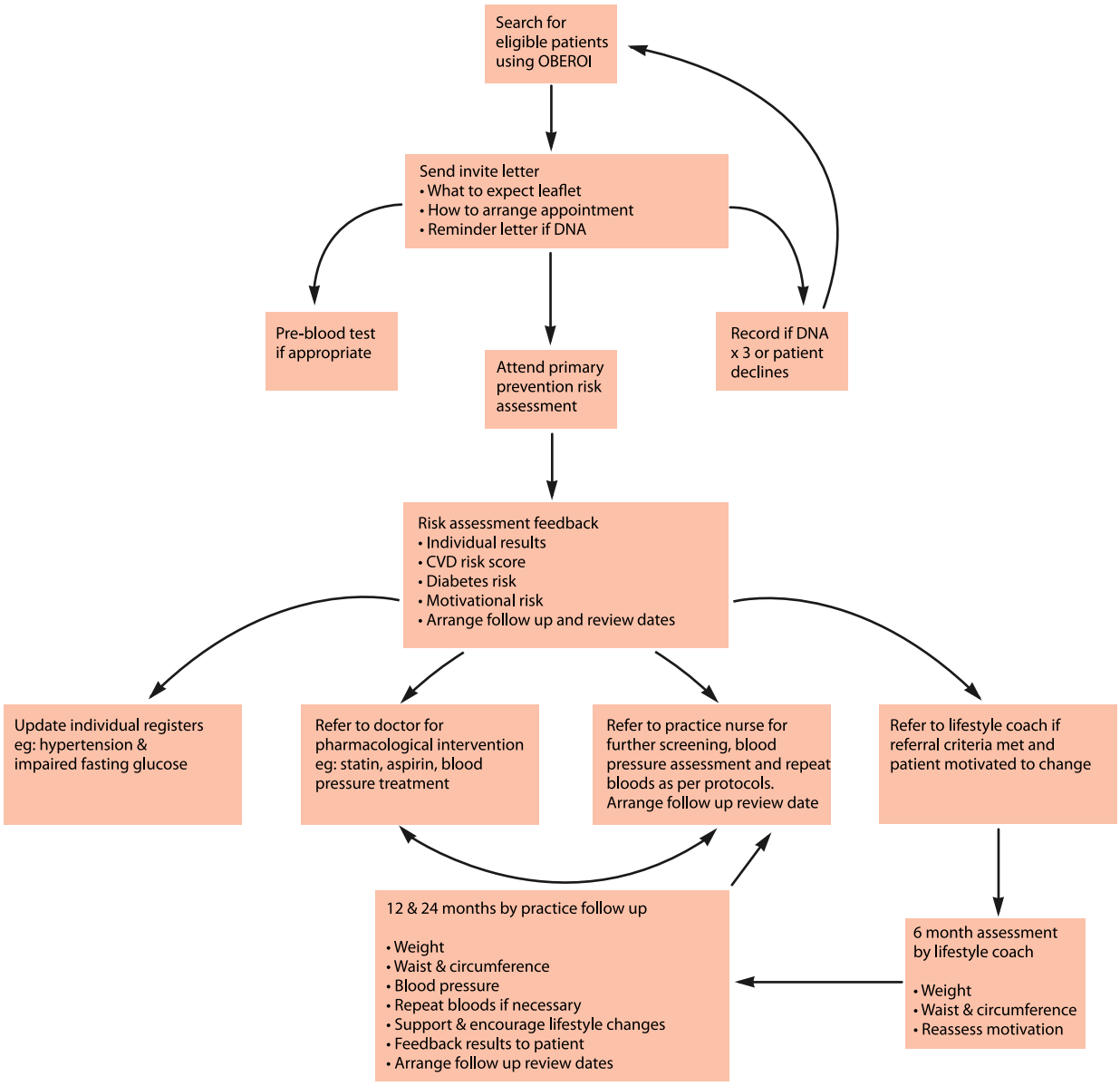
Or

- *Write to patient using the 2nd reminder letter and enclosing information leaflets.*
- *Please record all patient contacts on the Primary prevention template.*

If patient contacts surgery to decline the invitation, please record on template. If they would like to be invited at a later date please enter a diary date for primary prevention screening.

If the patient states they don't wish to be contacted please enter on template.

Cardiovascular screening flowchart



NHS
Stoke on Trent

Invitation letter

Practice details
Date

Patient details

Confidential

Dear

Invitation for a health check

You have been invited to come along to the surgery for a check up as you are now in the age range that may be at an increased risk of developing high blood pressure, heart attack, a stroke, diabetes or kidney disease. This is part of our practice commitment to the health of our patients.

As part of this check up, you may be asked to attend for a fasting blood test, but this is not always necessary. You will need to bring a fresh sample of urine with you; bottles are available from your surgery.

If you do not need a blood test: we have not enclosed a blood test card, and we ask that you ring the surgery to book an appointment as soon as possible with the lifestyle nurse.

If you need a fasting blood test: we have enclosed a fasting blood test card with this letter. It is important that you make an appointment to have this test done at least 2 weeks before attending the surgery for your check up with our lifestyle nurse. There are clinic sessions at local community health clinics where you can have your blood test. An information leaflet is enclosed to help you to make this appointment at one of the centres. Please remember to fast for at least 8 hours prior to your blood test. That means nothing to eat for 8 hours before your test. You may drink water and take your usual medication.

Please do not ring the surgery to arrange your blood test.

Once you have had your blood test you may contact the surgery and inform the receptionist that you would like to make an appointment with the lifestyle nurse.

We enclose an information sheet that explains exactly what will be involved in this check-up, and we really encourage you to attend.

If you would like to discuss the content of this letter or have any concerns please telephone xxxxxxxxxx and ask to speak to the lifestyle nurse.

Yours sincerely,

Lifestyle programme nurse/ Practice nurse

This letter can be adapted to suit individual practice requirements.
Please ask the IT support worker. You may want to include instructions for arranging the blood test.

NHS
Stoke on Trent

Reminder letter

Practice details
Phone number

Date

Dear

Reminder about invitation for health check

You may remember that we wrote to you recently to invite you to attend the surgery for a health check and blood test if needed. I notice from our records that we haven't heard from you yet.

We would like to encourage you to come along as soon as possible for this important check. This will give you peace of mind about your risk of heart disease or having a stroke or developing diabetes and if we do detect anything out of the ordinary we can start to deal with it before it becomes serious. The appointment will only take 30 minutes and with our clinic times we can usually find a time that will be convenient for you.

Of course, if you wish to decline this time but would like to be invited in the future please let us know.

With kind regards

Lifestyle programme nurse / Practice nurse

This letter can be adapted to suit individual practice requirements.
You may want to include instructions for arranging the blood test.

Patient Information leaflet

Why should I attend this health check?

Why it is important that I attend this appointment
You have been invited to come along as you are now in the age range that may be at an increased risk of developing high blood pressure, heart disease, stroke, kidney disease or diabetes. We hope to delay the onset, or minimise the risk, of complications of these diseases by inviting you to attend this screening appointment.

Initial appointment for a blood test
If your invitation letter asked you to have a fasting blood test, please follow the instructions provided to make your appointment at a local community clinic in your area. The blood test will check your cholesterol, thyroid function, kidney function, glucose (sugar).

This test should be done 10-14 days before your health check appointment so that we will have all blood test results available to discuss with you.

A fasting blood test means that you should not eat or drink for at least 8 hours before the test. Please note that if you have an afternoon appointment you may have breakfast at least 8 hours before your appointment. You may drink water and take any medication prescribed by your doctor at your usual time.

If you have any concerns about fasting please contact the surgery for advice.

What happens at my health check appointment?
Your appointment will be with the lifestyle nurse and will take approximately 30 minutes. The nurse will measure your height, weight, take your blood pressure and test your urine and find out how motivated you are about making any changes to your lifestyle.

You will have a discussion about your lifestyle (diet, physical activity, smoking habits etc) and family history of heart disease and diabetes. Your blood test results will be discussed. Please feel free to ask any questions or raise any concerns that you may have. We will give you a record of what we discuss for you to take away. You may be offered a chance to see a local lifestyle coach in the near future who can help you to develop a personal health improvement plan and support you in making improvements to your lifestyle. They will be able to identify an ideal mix of lifestyle improvement opportunities and signpost you to:

- Physical activity sessions
- Cook 'n eat sessions
- Weight management sessions – free weight watchers vouchers
- Thinking positively sessions

We can support you too if you want to stop smoking or cut down on the amount alcohol you drink.

Will I have to come back to the practice again?
For some patients (about 1 in 10) a follow up visit will be needed to have more blood tests or repeat blood pressure checks. We will let you know about this at your appointment or within 2 weeks of your visit.

Provided all the tests are reasonably normal you will not need a further appointment. If however, there is something is a little out of the ordinary we will arrange a follow up appointment with you. If you take up the opportunity to see a lifestyle coach the practice nurse or health care assistant would like to see your progress at 12 and 24 months later.

the lifestyle support programme

Patient Information leaflet

What to expect at your health check clinic appointment

Please allow 30 minutes for your appointment.

- Bring any medication (tablets, medicines) you are currently taking with you. This could be medication prescribed by your doctor or nurse, or that you buy over the counter.
- Please bring a fresh urine sample (bottles are available from reception).
- Wear comfortable non-restrictive clothing.
- Your blood pressure will be taken 2-3 times throughout the appointment, so that we can get an 'average' reading.
- We will measure your height and weight
- We will measure your waist.
- We will check your urine with a test strip. If necessary we may ask you to do another sample to send to the hospital for further tests if we suspect any infection is present.
- We will discuss:

  Your blood test results
  Your lifestyle including-diet, exercise habits, smoking etc
  Your family history of heart disease and /or diabetes
  Your motivation to make changes to your lifestyle.
  Your cardiovascular risk score.

What does the risk score indicate?
You will be given a score based on the results of the tests done during your visit to the surgery for your health check. For example, if your score is 30% that is the same as saying 30 out of 100 people will develop cardiovascular disease (i.e. 3 out of 10 people). This means that you have a 30% chance of developing a cardiovascular disease within the next 10 years. Note that the score cannot predict if you will be one of the three. It cannot predict what will happen to each individual person. It just gives you the odds.

You are said to have a:

- *High risk - if your score is 20% or more (i.e. that is a 2 in 10 chance or more of developing a cardiovascular disease within the next 10 years)*
- *Moderate risk - if your score is 10-20% (i.e. you have between a 1 in 10 and 2 in 10 chance of developing a cardiovascular disease within the next 10 years)*
- *Low risk - if your score is less than 10% (i.e. less than a 1 in 10 chance of developing a cardiovascular disease within the next 10 years)*

- In some patients (about 1in 10) a follow up visit is required for additional blood tests, to recheck if any of the results suggest diabetes, or to repeat your blood pressure if it was high.

Patient Information leaflet

How to arrange your fasting blood test

Please do not phone the surgery to arrange your blood test.
You can attend any of the local community clinics in your area.

To book an appointment please telephone 01782 555506

Monday	
Tunstall Health Centre, Dunning St	9am-12 noon
Smallthorne Health Centre, Baden Rd	9am-12 noon
Bentilee Neighbourhood Centre, Dawlish Drive	1pm- 4pm
Hanley Health Centre, Upper Huntbach St.	1.15pm - 4pm
Burslem Health Centre, Chapel Lane	1.15pm - 4pm
Tuesday	
Burslem Health Centre, Chapel Lane	9am -12noon
Tunstall Health Centre, Dunning St	9am - 12 noon and 1pm - 4pm
Wednesday	
Norton Clinic, Knypersley Rd.	9am - 12 noon
Hanley Health Centre, Upper Huntbach St.	9am -12 noon and 1pm - 4 pm
Tunstall Health Centre, Dunning St.	12.15pm - 2.40pm
Abbey Hulton Clinic, Leek New Rd	1.30 pm - 4pm
Burslem Health Centre, Chapel Lane.	9am - 12noon
Thursday	
Tunstall Health Centre, Dunning St	9 am- 12noon and 1pm - 4pm
Hanley Health Centre, Upper Huntbach St.	9 am - 12 noon and 1pm - 4pm
Friday	
Abbey Hulton Clinic, Leek New Rd	9 am- 12.15pm and 1.15 pm - 4pm
Smallthorne Health Centre, Baden Rd	1 pm - 4pm

When you attend for your fasting blood test, please ensure that you take the blood test request card which was included in your lifestyle clinic letter of invitation.
You **MUST NOT** attend the above clinics without an appointment.

Please book an appointment by telephoning 01782 555506.

IF YOU HAVE BEEN ASKED TO FAST PLEASE HAVE NOTHING TO EAT FOR 8 HOURS, BEFORE YOUR APPOINTMENT. Please note that if you have an afternoon appointment you may have breakfast 8 hours before your appointment.

the lifestyle support programme

NHS
Stoke on Trent

Primary Prevention Clinical Protocol

Contents

1. Aim
2. Scope of the policy
3. Stage 1: Identification
4. Stage 2: Lifestyle advice
5. Stage 3: Management of risk factors
6. Stage 4 Follow up and audit
7. Appendix 1 : Primary prevention template user guide
8. Appendix 1a: Ethnicity definitions
9. Appendix 1b: Measuring waist circumference and calculating body mass index
10. Appendix 1c : Diet definitions
11. Appendix 1d: Alcohol screening
12. Appendix 1e : Cigarette smoking guidance
13. Appendix 1f: Recommendations for review following blood pressure measurement
14. Appendix 1g: Management flow chart for hypertension
15. Appendix 1h : Diagnostic criteria for diabetes mellitus
16. Appendix 2: Limitations of Framingham risk score
17. Appendix 3 Normal cholesterol
17. Appendix 4 Practice protocol agreement
18. References

Primary Prevention Clinical Protocol

Aim

To identify people at significant risk of developing cardiovascular disease but who have not been identified as having evidence of cardiovascular disease, and offer them appropriate advice, motivation and treatment.

Introduction and scope of this protocol

These guidelines are intended to assist in the management of patients without clinical evidence of cardiovascular disease (CVD) but who are at significant risk. This is because they have a CVD risk ≥ 20%.

If they have a risk ≥ 20% they can make beneficial lifestyle changes which will further reduce their existing risk level. Such changes may include stopping smoking, improving diet, drinking less alcohol, reducing their weight and taking more exercise.

Stage 1

Identification

A register of all patients at risk of CVD should be compiled and maintained.

Data extraction software is available from the PCT to enable identification of patients aged 35-74 years who are likely to be at a defined higher risk of CVD.

Clinicians should enter all screening data onto the Primary Prevention template, following the user guide template instructions (Appendix 1). The template supports the identification of people with diabetes and hypertension.

If the person has a history of coronary heart disease, angina, stroke or transient ischaemic attacks, peripheral vascular disease or a monogenic lipid disorder, do not include in this in this primary prevention risk assessment process as these patients are already considered to be at high risk and so treatment should have already been initiated unless contraindicated.

For management of cardiovascular disease in patients with type 2 diabetes refer to the NICE Clinical Guideline 66 issued in May 2008.

Assessment Of Risk Factors

NICE (2008) recommended that the Framingham 1991 10 year risk equation should be used to assess CVD risk. The PCT has selected a Read code to support this advice which automatically calculates the CVD risk. For consideration of the limitations associated with the Framingham risk equation please refer to Appendix 2.

Patients without evidence of arterial disease should have their risk factors assessed, and the level of risk should be the indicator for active management. This level should be considered to be a CVD risk of ≥ 20% over 10 years.

CVD risk of 20% is approximately equivalent to a CHD risk of 15% over the same period.

It is important that all the practice team use the same risk assessment tool and Read code.

The PCT has developed a Primary Prevention template to use alongside the protocol. The data quality team will amend the EMIS primary prevention template for practices using other IT systems.

The factors needed to assess the patient's degree of risk are:

1. Age
2. Gender
3. Blood pressure
4. Smoking status
5. Total cholesterol and HDL cholesterol
6. Diabetes or no diabetes
7. ECG evidence of left ventricular hypertrophy (LVH)
8. BMI (see obesity NICE clinical guideline 43)

The PCT is also asking for a recording of the patient's current weight, height and BMI and waist circumference for this programme.

The following blood tests are required to support the primary prevention programme;

- Urea and electrolytes
- Total cholesterol/HDL ratio, fasting if possible (See Appendix 3)
- Glucose (fasting)
- Liver function test
- Thyroid function
- Estimated glomerular filtration rate (eGFR)

Please request a repeat blood test if there is no recording of these in the last 12months.

Stage 2

Lifestyle advice

Please follow the user guide to complete the Primary Prevention template (Appendix 1).

Offer all patients lifestyle advice to reduce their cardiovascular risk.

1. Stopping smoking

Advise as appropriate. Patients who actively wish to quit smoking can be offered detailed advice/ referral to specialist smoking cessation service within the practice or via an approved scheme.

To calculate pack years refer to the template user guide

2. Diet

Advise to eat a healthy diet, low in total and saturated fat, substituting with monounsaturated and polyunsaturated fats and oily fish, high in fresh fruit and vegetables and with no added salt.

Aim for BMI of 19-25 kg/m²
If BMI ≥25-30 kg/m² advise weight reducing diet
If BMI ≥30 kg/m² or <19 kg/m² Refer to dietician.
Waist circumference is also recommended for assessment of central obesity. (See template user guide, Appendix 1c and care pathway for the management of weight and obesity).

3. Exercise

Advise moderate physical activity for 30 minutes daily at least 5 times per week at a level where the patient feels warm and slightly out of breath. (See template user guide Appendix 1)

4. Alcohol

Advise they keep alcohol consumption within the recommended limits of 3-4 units per day (max 21u per week) for men and 2-3 units per day (max 14u per week) for women. (See Appendix 1e)

5. Avoid illicit drugs and substances.

Lifestyle advice should follow a patient centred approach with four stages:

- Eliciting the patient's views, beliefs and willingness to change.
- Explaining the nature of, and the reason for the advice.
- Negotiating and agreeing goals.
- Supporting the patient to achieve and maintain change.

This can be reinforced with appropriate health promotion materials.

Patients should be assessed for readiness to change and motivation.

Please refer to the Lifestyle Support Programme toolkit for the criteria for referral into the lifestyle programme.

Stage 3

Management of risk factors

1. Blood pressure

This should be measured in the sitting position after the patient has been resting for 5 minutes using an appropriate cuff size. For full management guidelines see NICE guidelines (2006). Hypertension; management of hypertension in adults in primary care, appendix1 and also please refer to your practice based hypertension protocols.
The flow chart below offers advice for medication guidance.

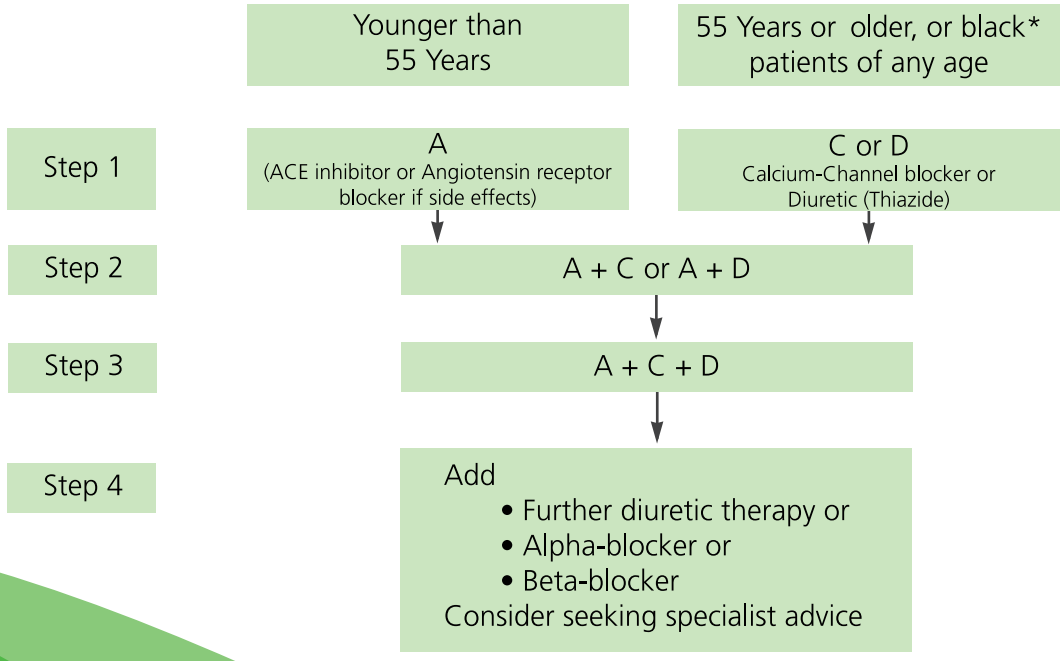
Offer all patients with raised blood pressure the appropriate lifestyle advice, with particular reference to weight reduction, moderate alcohol intake, limiting salt intake and physical activity.

Management of raised blood pressure should be in line with current guidelines, and the threshold for therapeutic intervention considered as appropriate.

An ECG should be recorded as part of the CVD risk assessment and to exclude left ventricular hypertrophy.

Blood pressure medication should be considered at a lower level of blood pressure for patients with a CVD risk ≥ 20%.

Chart to show how to choose drugs for patients with newly diagnosed hypertension (adaption of NICE diagram for the BPA factsheet www.bpassoc.org.uk)



*Black patients are those of African or Carribean descent, and not mixed race, Asian or Chinese patients.

2. Management of Lipids

Patients should have a serum fasting cholesterol, triglycerides, HDL and LDL.

- If triglycerides and LDL are normal then subsequent tests can be on a non-fasting total cholesterol and HDL.
- If levels are raised exclude secondary causes, for example diabetes, thyroid or renal disease, and increased alcohol intake.

Treatment

Simvastatin: 40mg* at night.

(*Refer to BNF for contraindications, cautions, drug interactions and side effects. Patients with concurrent prescription for drugs which interact with simvastatin may require a lower dose or an alternative statin).

A target for total cholesterol (TC) or LDL is not recommended for people treated with a statin for primary prevention. (NICE, 2008)

All patients prescribed a statin should be advised to report unexplained muscular pain. If this occurs measure their creatine kinase. If unexplained peripheral neuropathy develops consider differential diagnosis and take appropriate action.

At reviews please check that the patient continues to take the statin as prescribed.

Monitoring: Statins for primary prevention

Tests	*Lipid profile*	*Liver function*	*Comment*
Baseline	•	•	Fasting sample prior to starting treatment
3 months		•	
1 year		•	Then only repeat again if clinically indicated

NICE : Lipid modification 2008 (Clinical Guideline CG67)

3. Aspirin

Patients without established cardiovascular disease but with an assessed high risk of cardiovascular disease may be considered for treatment with aspirin 75mg daily.

The decision to use aspirin for primary prevention of CVD must consider individual patient risk of serious adverse effects with aspirin e.g. gastro-intestinal bleeding. In older patients and/or those with a history of gastro-intestinal disease, protection with a proton pump inhibitor should be considered.

Blood pressure should be controlled to at least 150/90mmHg before initiation of aspirin.

Refer to medicine management website for current PCT recommendations.
www.medicinesmanagementstoke.nhs.uk

4. Management of raised blood glucose and impaired fasting glucose (IFG)

For patients identified as having raised blood glucose (fasting plasma glucose), please follow guidelines in Appendix 1h. Add read code to record if impaired fasting glucose is confirmed.

5. Anti-obesity drugs

Drug treatment should only be considered after dietary, exercise and behavioural approaches have been started and evaluated.

Patients who have not reached their target weight loss or have reached a plateau on dietary, activity and behavioural changes alone should be considered for drug treatment.

Treatment

- Orlistat (first choice)
- Sibutramine

Refer to BNF for individual drug interactions, contraindications, cautions, drug interactions, side effects and monitoring requirements.
Co-prescribing of drugs aimed at weight reduction is **not** recommended.
Do not prescribe on repeat prescription.
Review regularly and record BMI in patients record.

Stage 4

Follow-up and audit

Patients on established primary prevention treatment should be reviewed annually as a minimum. Review more frequently during monitoring and medication titrations as per individual practice protocols. The lifestyle programme also requires follow up at 12 months and 2 years to record weight and motivation to change.

Audit

Review of the risk group may be performed annually. This will include:

- Validation of the registers; with cross checks of the appropriate Read codes and prescribing.
- Records of risk factors and levels of control, including smoking status, blood pressure, lipids and glucose, BMI, cholesterol, physical activity, and alcohol intake.
- Evidence of review in line with the recorded recall date.

Appendix 1

Primary prevention template user guide

Primary Prevention for CVD Template
(To be used in conjunction with the Lifestyle Screening Programme)

The Primary Prevention Template has been developed by Lesley Baddley (Data Quality Facilitator, North Staffs. Health Intelligence Service) in conjunction with Yvonne Mawby and Linda Picariello (Professional leads – Primary Prevention, NHS Stoke on Trent).

The purpose of the template is to enable GP practices to record core information relating to patients who have been identified and invited to attend lifestyle screening.

The aim of the Lifestyle Support Programme is to identify patients at significant risk of cardiovascular disease but who have not yet developed symptoms. They will be offered appropriate advice and treatment. The Lifestyle Support programme should be offered starting with a brief intervention in practice and a referral to the Lifestyle Programme if the patient indicates that they would like support to achieve change.

All users should have read the Primary Prevention Protocol before proceeding to complete the template.

The template should be accessed via consultation mode and the problem title should be Primary Prevention Screening for CVD (ensure you have selected Read Code 6C2). You will be prompted 'Do you wish to use the template associated with this entry?' Type in Y.

1st CVD Invite	The patient would have been identified via a computer system search. This implies initial letter sent to patient. Comments: please indicate if bloods were requested.
2nd CVD Invite	This implies 2nd letter sent to patient
3rd CVD Invite	This implies 3rd letter sent to patient
Declined PP Screening	Implies that the patient has contacted the practice but does not wish to participate.

DNA Primary Prevention	The patient would have had an appointment made in practice but failed to attend.
PP Audit Consent	The patient should sign a consent form to enable auditing of the programme. 'Y' implies consent 'N' implies declined.
Lifestyle screen	Y/N 'Y' implies that you have carried out most of the examinations contained within the template 'N' should be used if you are only recording minimal data (i.e. follow-up BPs)
Ethnic groups	This information should only be recorded once – please see Appendix 1a for guidance on how to interpret the ethnicity picking list – press F4 to extend picking list
Main spoken language	This information should be recorded once – press F4 to extend picking list
Need for interpreter	This question should be asked at intervals to ensure the information is kept up to date and accurate
BMI	You must record the patient's height and weight in order for the BMI to be automatically calculated

Waist circumference

Men

	Normal	Central obesity
White Caucasians	<102cm	≥102cm
Asians	<90cm	≥90cm

Women

	Normal	Central obesity
White Caucasians	<88cm	≥88cm
Asians	<80cm	≥80cm

When measuring waist circumference, ensure that a tape of adequate length is available. The correct position for measuring waist circumference is midway between the upper hip bone and the upper most border of the iliac crest. The tape measure should be held horizontally to the ground. Do not follow the line of the belt or belly button, see Appendix 1b.

Patients diet

The definitions of good, average and poor can be found in Appendix 1c.

Alcohol consumption

If the patient is an occasional drinker of alcohol you will still be prompted for the number of units consumed per week. We recommend recording occasional drinkers (i.e. someone who only drinks at Christmas or on other special occasions) as 0 units per week. Use the 5 shot questionnaire to identify dependency on alcohol (Appendix 1d).

Smoking

For information on how to record the tobacco consumption of pipe smokers and smokers who roll their own, please refer to a document called "Cigarette Equivalent for Tobacco Users" (Appendix 1e). Please ensure that the information you have been given is up-to-date and relevant by maintaining close links with your PCT's smoking cessation facilitator.

For patients who have stopped smoking please use 'ex-smoker' which will prompt you for the number of cigarettes the patient used to smoke. This supports pack year indicators.

Pack years

This is calculated by dividing the number of cigarettes smoked per day by 20 and then multiplying that figure by the number of years the patient has smoked. It is sometimes necessary to work this out in sections if the smoking habit has altered over the years i.e. 15 a day for 10 years, then 40 a day for 5 years.

A significant score is 15 pack years.

Physical activity

Enjoys light exercise indicates that the patient walks to the local shops, does light house work or equivalent most days of the week.
Enjoys moderate exercise indicates that the patient enjoys regular brisk walking, swimming, cycling, house work, gardening, DIY (at least 5 times a week for 30 minutes or more at moderate intensity).
Enjoys heavy exercise indicates that the patient is very physically active every day of the week i.e. for more than 60 minutes at or above moderate intensity.

Appropriate messages in the practice should be:

Encourage all people – young and old – to become and stay active.

- Children and young people should achieve a total of 60 minutes of at least moderate intensity activity each day. At least twice a week this should include activities to improve bone health, muscle strength and flexibility.

- For general health benefits, adults should achieve a total of at least 30 minutes a day of at least moderate intensity physical activity on 5 or more days of the week.

(Reference CMO Report 'At least five times a week' DoH April 2004)

Urinalysis	Routine dipstick urine, checking for protein and glucose. Please add comment re any actions e.g. MSU sent.
BP readings	Should be measured in a sitting position after the patient has been resting for 5 minutes using the correct cuff size. Refer to NICE guidelines 2006 and Appendices1f and 1g
Cuff size	Please state the size used and which arm the measure was taken from.
Pulse rate	Please state rate and rhythm.
Family history	This information should be as accurate as possible and not based on what the patient 'thinks'. The relationship that the patient has to the family member should only be recorded if the person is their mother, father, brother or sister. Other relatives (that still appear on the picking list) will not have the same impact on the patient's chances of contracting the chronic diseases in question.
10 year CVD risk	This is automatically calculated on completion of the template. You should take action with patients who have a CVD risk score of 20% or more.
At risk of IHD (Ischaemic heart disease)	If this conclusion is made please enter 'Y' if the CVD risk score is 20% or more. This will populate the primary prevention register.

At this stage of the template you will need to determine whether or not the patient is willing to be referred to the lifestyle coach.

Loan of equipment	Complete if a pedometer has been issued for 12 weeks.
Equipment returned	Complete when the pedometer has been returned.
Lifestyle programme declined	'Yes' implies that the patient has declined the programme. This may be because the patient is not interested or is already self motivated (i.e. attends a weight watchers meeting/gym). Please add free text relaying the patient's comments.
Refer to lifestyle coach	'Yes' implies that the referral will be made – please ensure that you complete the referral form and if there is any uncertainty regarding the patients medical condition, medications or limitations to physical activity please ask a practice clinician to confirm they are happy for the referral to proceed. please take appropriate action to ensure that this is processed (the process may vary practice to practice).
Commenced lifestyle	This prompt will be completed once the programme details have been received from the lifestyle coach.
LS Lost to F/U	This prompt will be completed once the details have been received from the lifestyle coach. Free text enables you to add detail about why the patient failed to complete the programme.
LS programme completed	This prompt will be completed at the 12 month assessment following referral to the lifestyle coach. Check that the letter from the lifestyle coach has been received and that the data has been transferred to the template for audit purposes. Please ensure that the dates are those when the examinations occurred and not today's date.
CVD Risk Review	A review diary date should be entered to recall patients for repeat assessment and to re-check motivation (one and two year weight loss for LES payments).

Appendix 1a

Ethnicity – definitions

These ethnicity codes are local codes created by EMIS for convenience.

British/Mixed British	Both parents of the patient are White British Mixed British implies that the patient has parents who are: White and of English, Scottish, Welsh or of Northern Irish descent - e.g. Mother English, Father Welsh
Irish	Both parents of the patient are White and of Southern Ireland descent
Other White	Where both parents of the patients originate from: Cyprus Greece Turkey Italy Irish Traveller Gypsy/Romany Poland Baltic States Commonwealth (Russia) Kosova Albania Bosnia Serbia Other Republics from the former Yugoslavia Other White European unspecified
White & Afro- Caribbean	Where a patient has one parent of White descent and another who is Black Afro-Caribbean
White & Black African	Where a patient has one parent of White descent and another who is Black African
White & Asian	Where a patient has one parent of White descent and another who is Asian

Other Mixed	Black and Asian Black and Chinese Chinese and White Asian and Chinese Other mixed or mixed unspecified
Indian/British Indian	Indian implies that the patient's parents are both Indian. British Indian implies that the patient, although of Indian parentage was born in Britain
Pakistani/British Pakistani	Pakistani implies that the patient's parents are both Pakistani. British Pakistani implies that the patient, although of Pakistani parentage was born in Britain
Bangladeshi/British	Bangladeshi implies that the patient's parents are both Bangladeshi. British Bangladeshi implies that the patient, although of Bangladeshi parentage was born in Britain
Other Asian	Punjabi Kashmiri Sri Lankan Tamil Caribbean Asian Mixed Asian Other Asian or Asian unspecified
Caribbean	Caribbean
African	African
Other Black	Somali Nigerian Mixed Black or other Black unspecified
Chinese	Chinese

Other	Vietnamese
	Japanese
	Filipino
	Arab
	North African
	Israeli
	Iranian
	Kurdish
	Moroccan
	Malaysian
	Latin American
	South & Central American
	Mauritian/Seychellois/Maldivian/St. Helena
Ethnic category not stated	Patient chooses not to disclose their ethnicity

Appendix 1b

Measuring waist circumference and calculating body mass index

Waist circumference

- This should be measured over bare skin, or light clothing.
- Ask the subject to stand with their arms by their sides and to relax, not to deliberately hold stomach in or out looking straight ahead.
- If possible, kneel or sit on a chair to the side of the subject.
- Palpate the lower rib margin (costal margin) and the iliac crest and mark half way between the two points. This is the level the measurement of waist circumference should be taken.
- The measuring tape should be placed horizontally on the circumference and you should check that it is not kinked or twisted; this is best done by looking sideways on. As well as checking the front, peer round the subjects back to inspect their left side. The tape should rest on the skin, not indent it. Do not pull too tight.
- Take the reading at the end of expiration.
- Measure to the nearest (cm)
- Add this data to the template.

Central obesity is present if the waist circumference is >102 cms (40.2") in men and >88cms (34.5") in women.

For the Asian population, lower values of waist circumference are more appropriate: a measurement of >90cms (35.4") in men and >80cms (31.4") in women demonstrates central obesity

Body mass index

Weight measurement:

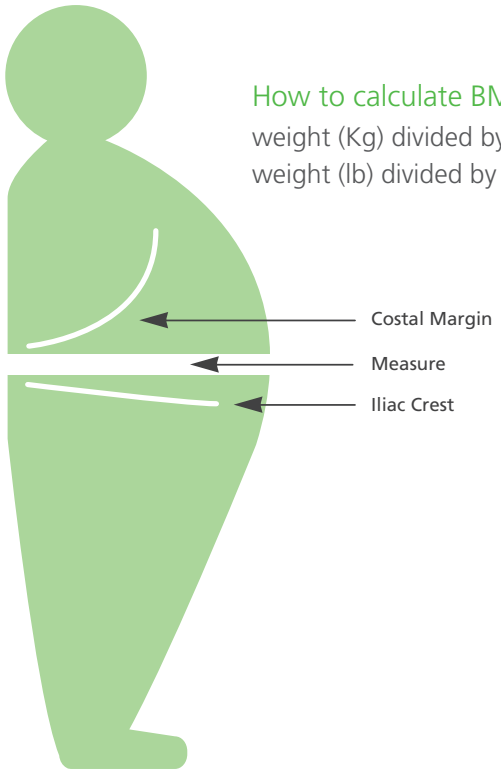
The patient should remove their shoes and coat and heavy outerwear for this test.

Ensure scales have been calibrated/serviced within the specified time range.

Set scale to Zero.
Ask patient to step on scales.

Wait for weight to register properly.

Record weight (usually in Kg). Calculate Body Mass Index (BMI) and explain result to patient.



How to calculate BMI:

weight (Kg) divided by height (m^2) or
weight (lb) divided by height (in^2) x 703

Appendix 1c

Diet definitions

Please use the following classifications to define dietary findings.

Good

as a definition check if the person does the following:

- Has 3 regular meals a day
- Has food from each of the 4 main food groups:
- Includes at least 5 fruits/vegetables portions a day
- Has starchy foods at each meal
- Has meat, fish (especially oily fish) or alternatives at 2 meals daily
- Has 3 milk group items a day (= to 1 pint milk)

Also

- Limits added fats, especially saturated fats
- Limits sugar and sugary food
- Limits salty foods and does not add salt to food

Average

If the above is not achieved on most days then consider using average if the following are achieved:

- Does not always have regular meals
- Includes food from each of the 4 food groups but amounts are insufficient
- Has at least 3 portions of fruit and vegetables a day
- Has food high in saturated fat, sugar and salt on most days
- Uses convenience/takeaway foods on most days.

Poor

to define the diet of people who:

- Regularly miss meals and/or
- Do not include all the 4 food groups
- Do not include fruit and vegetables every day
- Eat fried or fatty foods every day
- Consume frequent amounts or sugary food and drink every day
- Adds salt to most food and regularly eats salty foods

Sources: Margaret Teasdale, Chief Dietitian, University Hospital of North Staffordshire (based on the 'Eat Well Plate. 'Food Standards Agency 2007)

Siu-Ann Pang, Senior Health Improvement Specialist-Obesity, Directorate of Public Health

Appendix 1d

Screening for Alcohol Related Interventions – Five shot questionnaire

Please complete the following assessment with your patient:

How many units does the patient drink on a typical daywhen he/she is drinking? _____ units

What is the patient's pattern of drinking ?

daily ☐ weekly ☐ daily ☐ binge ☐ occasional ☐

1. How often do you have a drink containing alcohol?	
	SCORE
Never	0.0
Monthly or less	0.5
Two or four times a month	1.0
Two or three times a week	1.5
Four or more times a week	2.0

2. How many drinks containing alcohol do you have on a typical day when you are drinking?	
	SCORE
1 or 2	0.0
3 or 4	0.5
5 or 6	1.0
7 to 9	1.5
10 or more	2.0

3. Have people annoyed you by criticising your drinking?	
	SCORE
Yes	1.0
No	0.0

4. Have you ever felt bad or guilty about your drinking?	
	SCORE
Yes	1.0
No	0.0

5. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?	
	SCORE
Yes	1.0
No	0.0

Total score =

If score is less than 2.5 provide advice and information on alcohol misuse
If score is 2.5 or more refer to alcohol and drugs service in Staffordshire (ADSIS) using their referral form. Email: adminhanley@adsis.org.uk or fax 01782 209122

Appendix 1e

Cigarette Equivalents for Tobacco Users

- Cigar smoker

One Café Crème (or similar small sized cigar) is equivalent to approx. 1.5 cigarettes
One Hamlet (or similar medium sized cigar) is equivalent to approx. 2 cigarettes
One Havana (or similar large sized cigar) is equivalent to approx. 4 cigarettes

- Pipe smokers

One pipe bowl of tobacco is roughly equivalent to 2.5 cigarettes.

Take the total number of bowls of tobacco smoked per day and multiply by 2.5

- Roll Your own cigarettes

If a smoker is unsure how many roll-ups they smoke per day, see the list below which may be of assistance:

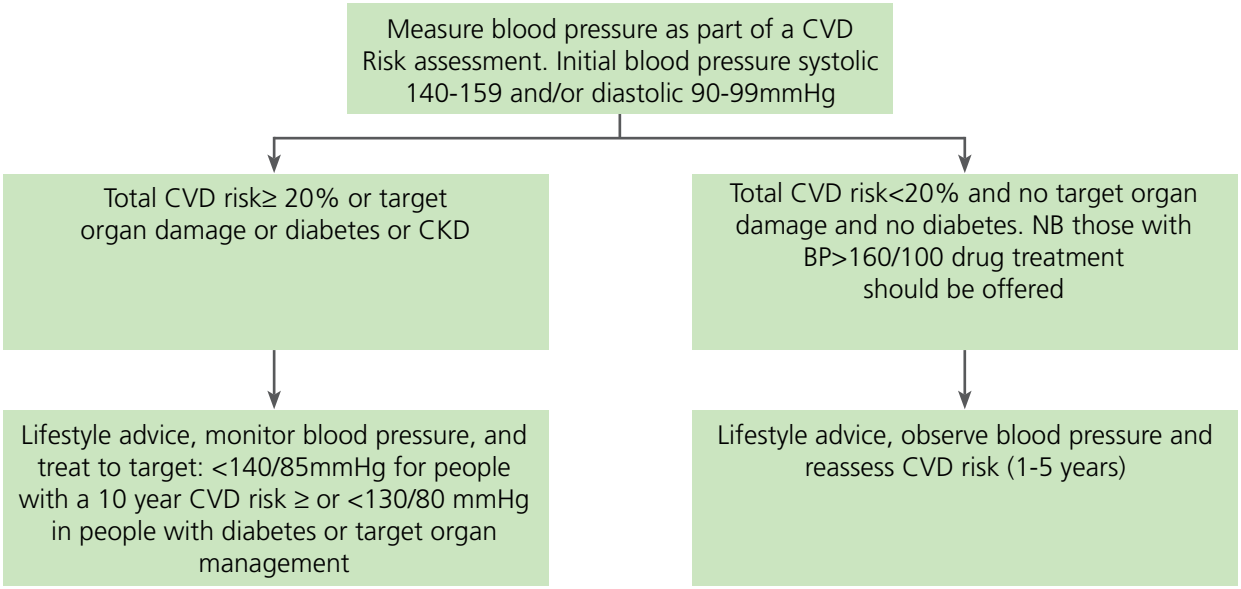
Each 25 gms (1oz) of tobacco is approx. equivalent to 50 cigarettes. Ask the smoker how many ounces of tobacco they smoke per week, then apply the following formula, which gives a fairly accurate guide to the cigarette equivalents smoked:

- 25 gms tobacco (1oz) smoked per week = 50 cigs, divided by 7 days = approx. 7 cigs/day
- 50 gms tobacco (2oz) smoked per week = 100 cigs, divided by 7 days =approx. 14 cigs/day
- 75 gms tobacco (3oz) smoked per week = 150 cigs, divided by 7 days = approx. 21 cigs/day
- 100 gms tobacco (4oz) smoked per week = 200 cigs, divided by 7 days =approx. 28 cigs/day
- 125 gms tobacco (5oz) smoked per week = 250 cigs, divided by 7 days = approx. 35 cigs/day
- 150 gms tobacco (6oz) smoked per week = 300 cigs, divided by 7 days = approx. 42 cigs/day

Appendix 1f

Recommendations for review following blood pressure measurement

Intervention thresholds for blood pressure



Note blood pressure targets are the same regardless of age or ethnicity. A lower target is required for patients with diabetes or renal disease.

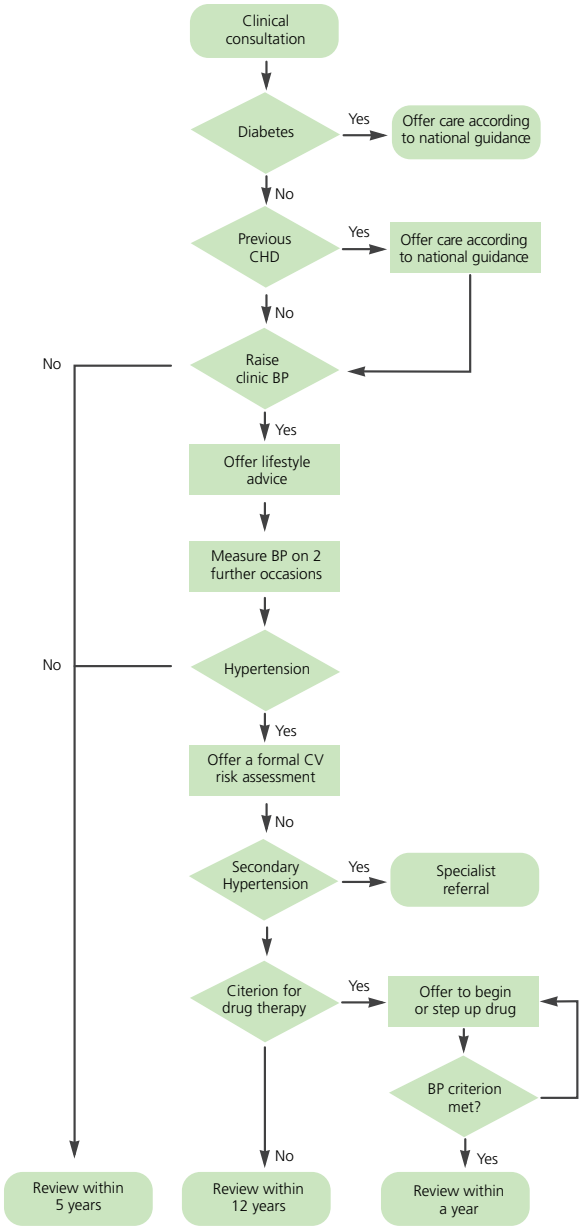
Blood Pressure Level	Recommendation
Systolic (SBP) <130mmHg and/or Diastolic(DBP)<85mmHg	Review within 5 years
SBP 130-139mmHg and/or DBP 85-89mm/hg and/or people who have had a high BP any time previously.	Review annually
SBP 140-159mmHg and/or DBP 90-99mmHg	CVD complications/ target organ damage (TOD) or diabetes present: confirm within 12weeks, and then treat. Re-measure at monthly intervals if CVD complications/TOD or diabetes is absent
SBP ≥ 160-179mmHg and/or DBP ≥ 100-109mmHg	CVD complications/TOD or diabetes present confirm over 3-4 weeks, then treat. CVD complications/TOD or diabetes absent: lifestyle measures, re-measure weekly initially, and treat if BP persists at these levels over 4-12 weeks.
SBP ≥ 180-219mmHg and/or DBP 110-119mmHg	Confirm within 2 weeks, and then treat
SBP ≥220mmHg and/or DBP≥ 120mmHg	Repeat on same day and treat immediately if confirmed.
Secondary hypertension i.e. hypertension due to a known underlying cause.	Specialist referral is appropriate. (Admission for immediate treatment is unnecessary for most people with secondary hypertension.)

Williams et al, 2004

Appendix 1g

Management flowchart for hypertension

Flowcharts cannot capture all the complexities and permutations affecting the clinical care of individuals managed in general practice. This flowchart is designed to help communicate the key steps, but is not intended for rigid use or as a protocol.



1. Raised blood pressure (BP) > 140/90 mmHg either / or both systolic and diastolic exceed threshold). Take a second confirmatory reading at the end of the consultation. Take a standing reading in patients with symptoms of postural hypotension.

2. Explain the potential consequences of raised BP. Promote healthy diet regular exercise and smoking cessation.

3. Ask the patient to return for at least two subsequent clinics at monthly intervals, assessing BP under the best conditions available.

4. Hypertension: persistent raised BP > 140/90 mmHg at the last two visits.

5. Cardiovascular (CVD) risk assessment may identify other modifiable risk factors and help explain the value of BP lowering and other treatment Risk charts and calculators are less valid in patients with CVD or on treatment.

6. Refer patients with signs and symptoms of secondary hypertension to a specialist. Refer patients with malignant hypertension or suspected phaeochromocytoma for immediate investigation.

7. Offer treatment for: (A) BP 160/100 mmHg; or (B) BP 140/90 mmHg and 10-year risk of ≥CVD 20% or existing target organ damage. Consider other treatments for raised cardiovascular risk including lipid lowering and antiplatelet therapies.

8. As needed, add drugs in the order shown in the algorithm on page 7.

9. BP 140/90 mmHg or further treatment is inappropriate or declined.

10. Check BP, reassess CVD risk and discuss lifestyle.

11. Review patient care: medication, symptoms and lifestyle.

Appendix 1h

Diagnostic criteria for diabetes mellitus

Recommendations from the Diabetes Management Guidelines 2008
North Staffordshire diabetes project clinical pathways group.

Testing and Diagnosis

Mandatory testing required if any of the following are present:
Thirst, polyuria, nocturia, weight loss, pruritus vulvae, balanitis, recurrent infections, visual disturbance, foot ulcers, urinary dysfunction, glycosuria.

Diagnosis

1. Symptoms of diabetes (polyuria, polydipsia) PLUS
    - a random venous plasma glucose ≥ 11.1 mmol/l
    - or a fasting venous plasma glucose ≥ 7.0 mmol/l
    - or a plasma glucose ≥ 11.1 mmol/l, 2 hours after 75g anhydrous glucose – oral glucose tolerance test (OGTT)

2. In the absence of symptoms, diagnosis of diabetes cannot be made on a single glucose measurement. At least one additional glucose result in the diabetic range (either random or fasting), on a different day is required. If the fasting or random glucose values are not diagnostic, the 2 hour value should be used. The repeat test should ideally be within 2-4 weeks.

Impaired glucose tolerance (IGT)

- is a state of impaired glucose regulation (fasting glucose <7.0 mmol/l and 2hr OGTT ≥ 7.8, but <11.1 mmol/l).
- It is associated with an increased risk of progression to Type 2 diabetes and an increased risk of macrovascular disease.

Impaired fasting glycaemia (IFG)

These individuals have a fasting glucose above normal but below that required for the diagnosis of diabetes: Two fasting plasma glucose ≥ 6.1 mmol/l but <7.0 mmol/l.
IFG approximately corresponds to IGT. Diabetes UK recommends that individuals with IFG and IGT should have an OGTT to exclude diabetes.

Gestational diabetes

Diagnosed if FBG in pregnancy is >6mmol/l or 1 hour post prandial > 7.8mmol/l.
If FBG is > 5.5mmols/l or 2 hr BG≥7 mmol/l –refer to diabetes centre.
NB in pregnancy if FBG >5.5 mmol/l or 2 hr glucose ≥7.0 mmol/l refer to diabetes centre +/or obstetric unit

Oral glucose tolerance test

Glucose tolerance testing (OGTT) can be arranged by contacting the laboratory on 01782 555195 or by following the protocol detailed below.
Note: Random glucose = 11.1 or fasting glucose = 7.0mmol/L is diagnostic of diabetes mellitus. Fasting glucose < 5.6mmol/L on two occasions – OGTT not indicated.

Glucose tolerance testing protocol 2008

Indications

The diagnosis of diabetes mellitus is made on the basis of an elevated fasting glucose or post-prandial glucose concentration in a symptomatic patient. In the case of asymptomatic patients, two elevated concentrations. The glucose tolerance test is only used when such measurements are equivocal and in most patients it is not required for diagnosis.

Contraindication

This test should not be performed in patients with periodic hypokalaemic paralysis.

Preparation

Patients should fast from 10pm. the previous night if the test is to be performed at 9am. They must have nothing to eat and only water to drink. Medication is allowed but only taken with water. Patients should eat their normal diet for 72 hours prior to starting the fast.

Note

1. Ensure patient has fasted and drunk only water.
2. Ensure that sample tubes are clearly labelled as 0 minutes and 120 minutes.
3. Remember that 120 minutes is from the time of the glucose load, not from the time of collection of the first glucose sample.
4. Patients should remain at rest during test - i.e. sit in waiting room.

Procedure

1. A fasting blood sample is taken for glucose (fluoride oxalate tube) and HbA1c (pale lilac tube).
2. Glucose load is given.
   a. Adults: 113ml of Fortical diluted to 200ml with water which is equivalent to 75g glucose.
   b. Lucozade can also be used – the current formulation of 73Kcal carbohydrate /100mL gives 75g glucose in 419mL. Both these preparations are preferable to glucose powder which can make patients nauseous and invalidate the test by vomiting. The patient should take about 2-3 minutes to consume the drink.
   c. Children: The dose is weight related 1.75gm/kg body weight, up to a maximum load of 75gm.
3. A glucose sample (fluoride oxalate) is taken 120 minutes after consumption of the glucose load.

Interpretation will be given with the report. However, if any advice is needed, then contact HS Drummond (principal clinical biochemist) on 01782 555195.

	Fasting Glucose	Random Glucose	Oral Glucose test (OGTT)
Diabetes	FBG ≥7.0 mol/l plus symptoms	RBG ≥ 11.1 mmol/l plus symptoms	2hr post glucose ≥11.1 mmol/l
Impaired Glucose Tolerance (IGT) (This is associated with an increased risk of progression to Type 2 diabetes and an increased risk of macrovascular disease)	FBG <7 mmol/l	≥ 7.8 but <11.1 mmol/l	IGT = 2hr post glucose ≥7.8 and <11.1 mmol/l
Impaired fasting glucose (IFG) (This demonstrates a fasting glucose above normal but below that required to diagnose diabetes. Requires 2 tests in this range to confirm)	FBG< 7.0 mmol/l		OGTT recommended to exclude diabetes
Normal	FBG ≤6.0 mmol/l		2hr post glucose <7.8 mmol/l

Appendix 2

Limitations of Framingham risk score

Reference: NICE Lipid Modification: full guideline May 2008

The Framingham risk should not be used for people who are already considered at high risk of CVD because of:

- familial hypercholesterolaemia or other monogenic disorders of lipid metabolism.
- Diabetes, see Type 2 diabetes; the management of type 2 diabetes (update) NICE clinical guideline 66. 2008

You should be aware that Framingham 1991 risk equations may overestimate risk in UK populations.
When using the risk score to inform drug treatment decisions, particularly if it is near to the 20% risk threshold, you should consider other factors that:

- may predispose the person to premature CVD, and
- may not be included in calculated risk scores.

Ethnicity, body mass index and family history of premature heart disease should be routinely recorded in medical records.

The estimated risk should be increased by a factor of between 1.5 and 2.0 if more than one first degree relative has a history of premature CHD.

The estimated risk for men with a South Asian background should be increased by a factor of 1.4.

Socioeconomic status should be considered when using CVD risk scores to inform treatment decisions.

Severe obesity (BMI>40kg/m^2) affects CVD risk and should be considered when using risk scores to inform treatment decisions (see 'Obesity', NICE clinical guideline 43. 2006)

CVD risk may be underestimated in people who are already taking antihypertensive or lipid modification therapy, or who have recently stopped smoking. Clinical judgement should be used to decide on further treatment of risk factors in people who are below the 20% CVD threshold.

Appendix 3

Normal cholesterol levels

Total cholesterol (TC)	≤ 5mmol/l
Cholesterol/HDL ratio	4
LDL cholesterol	≤3 mmol/l
Triglycerides	<2 mmol/l
HDL cholesterol	>1 mmol/l

JBS guidelines (JBS2) guidelines on the prevention of cardiovascular disease (2005)

The basis to initiate statin therapy should not be based on lipid levels alone, it should form part of a formal cardiovascular risk assessment.

Total cholesterol and HDL cholesterol can usually be measured in the non-fasting state. However, in all of those in whom there is a higher risk, i.e. those with raised blood pressure, on hypertension or obesity registers, should have a fasting lipid profile.

Monitoring lipids in the non fasted state may underestimate the LDL cholesterol level.

Consider the possibility of familial hypercholesterolaemia in adults with a raised total cholesterol of >7.5 mmol/l especially if there is a personal or family history of premature coronary heart disease.

Appendix 4

Practice protocol agreement

Primary Prevention Protocol and Template

I have read and agreed the protocol and template user guide

Signatures

Clinical/medical lead date

Practice manager date

This protocol will be reviewed January 2010 or earlier if new evidence emerges.

References

British National Formulary (BNF) Statin Cautions. http://bnf.og.bnf

National Service Framework for Coronary Heart Disease. London: Department of Health. 2000

JBS (2) Joint British Societies' guidelines on prevention of cardiovascular disease in clinical practice. Heart 2005; 91 supplement 5:v1-52

National Institute for Health and Clinical Excellence. Hypertension: Management of hypertension in adults in primary care. NICE clinical guideline (CG 34) 2006

National Institute for Health and Clinical Excellence. Cardiovascular risk assessment: the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline (67) 2008

National Institute for Health and Clinical Excellence. Obesity: The prevention, identification, assessment and management of overweight and obesity in adults and children. Nice clinical guideline (CG43) 2006

National Institute for Health and Clinical Excellence. Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline (CG67) 2008

Scottish Intercollegiate Guidelines Network. Risk estimation and the prevention of cardiovascular disease. National clinical guideline, 2007

World Health Organisation. Definition and diagnosis of diabetes mellitus and intermediate hyperglycaemia: Report of a WHO/IDF consultation, 2006

Acknowledgements

UK National Screening Committee
The handbook for vascular risk assessment, risk reduction and risk management. A report prepared for the national screening committee by University of Leicester. March 2008

NHS
Stoke on Trent

Referral guide to the Lifestyle Support Programme

Initial referral will be via the project support worker or the general practice team

Step one

Identify eligible patients via Primary Prevention screening. Patients are also eligible if they are on the diabetes or CHD register, they should have completed recent cardiac rehabilitation to phase three. Discuss the benefits of the LSP with patient and ask if they would like to be referred to the programme.

Step two

If the patient is assessed as being well motivated, then a Lifestyle Support Programme referral form is completed. The practice team or project support worker should ensure that all required details are completed. Please list all medication and specify if there are any physical activities that the patient is advised not to do, in case they choose a physical activity option with the lifestyle coach.

A patient contact number is required (landline and/or mobile), and the referral form should be jointly signed with the patient.

The top copy of the form is then faxed to the LSP 'safe haven' - 01782 298054

Step three

Once the referral has been faxed, the patient is given the top copy or a copy and a patient information leaflet.
The patient should receive a call from an assigned lifestyle coach within 5 working days to arrange the first consultation. If the patient does not receive a call within this time they can contact the Lifestyle Support Team directly for advice.

Step four

Update the Primary Prevention Template to indicate LSP referral has been initiated and file paperwork with patient's records.

The Lifestyle Support Team will feedback patient progress to General Practice colleagues at regular intervals, as per the LES agreements.

Once your patient understands what the lifestyle referral entails and still wishes to participate in the lifestyle support programme they must sign their consent (on the referral form) to indicate that they agree to participate in the programme and that they are happy for their progress to be audited. Information will only be stored on NHS secure data systems. They will be contacted by their own lifestyle coach to arrange an appointment with them within 5 working days of the coach receiving the referral letter.

You will still be managing any health problems in those patients not wishing to be referred to the lifestyle support programme. You can ask them at a subsequent consultation if they have reconsidered being referred to the lifestyle coach.

Inclusion criteria

Pre-requisites : all persons must reside in Stoke on Trent, identified as having a body mass index of 25 kg/m² or more and present with one or more of the following:

- Cardiovascular disease risk score of ≥ 20% for CVD over 10years or likely to reach this soon if no action taken.
- On diabetes register or have impaired fasting glucose (IFG) ≥ 6.1 mmol/L < 7mmol/L over 2 fasting readings.
- On cardiovascular disease register.
- Having undergone cardiac rehabilitation to at least phase III and been discharged to primary care.

It is also important for the GP or nurse referring the person to the lifestyle coach to establish that the person's condition is well controlled and there are no existing complications that may preclude the person from participating in a moderate intensity physical activity programme. Moderate intensity describes a level of effort in which a person should experience:

- Some increase in breathing or heart rate
- Perceived exertion – the effort a person might expend while walking briskly, mowing the lawn, dancing, swimming or cycling on level terrain.
- Any activity that burns 3.5 to 7 calories per minute

Please consider referring to the lifestyle coach for other interventions i.e. weight management, thinking positively and cook 'n eat activities.

Exclusion criteria for exercise referral only (please make it explicit in the referral form notes that the person should not exercise). **People:**	**Total contra-indications to exercise:** **The following symptoms or conditions are absolute contraindications to the physical activity component within the Lifestyle Support Programme:**
• with a cardiac condition should fit the inclusion criteria above. • awaiting medical investigations (unless exercise has been identified as being complementary or therapeutic to ongoing investigations). • with a neurological condition who may require close supervision whilst exercising or where exercise might cause unexpected episodes of disability such as Menieres disease. Those with epilepsy should have been seizure free for at least one year. • with neuromuscular or rheumatoid disorders that are exacerbated by exercise. Patients with rheumatoid arthritis should be encouraged to exercise but not during flare ups. • who have had a major operation or joint surgery within the last three months. • with musculo-skeletal pain that has not been assessed.	• Unstable angina (or newly diagnosed within one month) • Heart failure • Resting systolic blood pressure > 180 mmHg or resting diastolic > 100 mmHg • Uncontrolled tachycardia >100 beats per minute at rest • Ventricular or aortic aneurysm • Significant drop in blood pressure during exercise • Uncontrolled arrhythmia that compromises cardiac treatment • Febrile illness / acute infection

Please note: these are NHS Stoke on Trent guidelines for referral to the lifestyle coach and their assessment of options including physical activity. The provider of physical activity will take the person's current health condition into account when they assess and organise the physical activity programme they feel is safe for the person. The provider is responsible and accountable for recommending and supervising a particular physical activity for individual participants on the Lifestyle Support Programme.

Stoke on Trent Lifestyle Support Programme

Referral Form

the lifestyle support programme

Name _____ Date of birth _____/_____/_____

Address _____

_____ Postcode: ST_____ Tel. No: _____

Mobile Tel No: _____ Gender: M ☐ F ☐

Referred From _____ NHS No: _____

Date faxed to Lifestyle Support Programme administrator ____/_____/_____

Name of Lifestyle Coach (completed after referral) _____

Venue _____ Contact Tel. No: _____

Inclusion Criteria

- BMI >25 ☐
- Cardiovascular Disease risk score of >20% for CVD over 10 years ☐
- On Diabetes Register or have Impaired Glucose Intolerance ☐
- Identified Cardiovascular Disease ☐
- Having undergone Cardiac Rehabilitation to at least Phase III and been fully discharged to Primary Care ☐

It is also important to establish that the client's condition is well controlled and there are no existing complications that may preclude the client from participating in a moderate intensity physical activity programme.

Pre-Assessment

Systolic BP _____

Diastolic BP _____

Pulse Rate _____

CVD Risk Score _____

B.M.I. _____

Waist Circumference _____

Well motivated Yes ☐ No ☐

Comments – please list any medical conditions that may limit physical activity.

_____

_____

_____

_____

_____

List medications:

Heart ☐ GTN ☐

Hypertension ☐

CVD Prevention ☐ e.g. aspirin, statin

Diabetes ☐ Insulin ☐ Tablets ☐

Asthma / COPD ☐ Inhaler(s) ☐ Tablets ☐

Pain Management ☐ Analgesics / NSAIDs ☐

You may wish to print off the patient's 'current' prescription drug list and fax with the form.

I agree that I am well motivated and understand that my personal details will be used for evaluation purposes by Staffordshire University. I also understand that my personal and medication details will be stored securely and may be shared with members of the Lifestyle support delivery team (Voluntary Action Stoke on Trent and Stoke on Trent City Council) in order that I receive the best possible advice. I will inform the lifestyle coach of any changes in my condition or medication.

Signature of patient _____Date____/____/____ **Print Name**_____

I agree that the patient meets the inclusion criteria as set out in the Lifestyle Support Programme toolkit. The patient's current health is well controlled and I know of no other existing reasons why the patient is not fit for everyday physical activity, which may preclude the patient from participating in this programme.

Signature of referrer _____Date____/____/____ **Print Name**_____

To be completed by Programme Admin Team

Programme commenced / completed

Commenced Lifestyle Programme ____/_____/_____

Date completed Lifestyle Programme ____/_____/_____

Date completed information sent back to original referrer ____/_____/_____

Practice information & contact number

_____

_____

_____

_____

Fax to Lifestyle Support Programme Administrator on 01782 298054 and please give a copy to client

NHS Stoke on Trent

Patient Information leaflet

Patient Information

Clinical results and actions

Name: **Date:**

	Ideal Score	Your Score	Agreed Action	Follow up Appointment
My Weight is:				
My waist circumference is:	Men: less than 102cm (40.5") Women: less than 88cm (34.5")			
My body mass index (BMI) is:	Normal:20-25kg/m²			
My smoking habit is:	No tobacco			
My alcohol intake is:	Men: ≤ 21 units per week Women: ≤ 14 units per week			
My total cholesterol level is:	≤ 5 mmol/l			
My glucose level is: fasting/non fasting	Fasting: less than 7mmol/l Non Fasting: less than 11.1mmol/l			
My blood pressure is:	Below 140/90mmHg and lower if you have diabetes			
My cardiovascular risk is:	Less than a 20% risk in the next 10 years			
My level of physical activity is:	Ideal score = at least 5x30 minutes moderate intensity sessions per week			
Agreed changes that I may need to make to my diet				
My next appointment with the surgery is due:				

the lifestyle support programme

Patient Information leaflet

Your consultation with a lifestyle coach

The Lifestyle Support Team is a team of local people from across Stoke on Trent who are qualified to support you through your chosen lifestyle change(s). You will be assigned a personal lifestyle coach and will remain in contact with that same coach until you complete your programme.

Your lifestyle coach will work with you to identify what improvements you would like to make to your lifestyle and support you in developing a personal health plan to achieve your chosen lifestyle change(s).

The first meeting will take 45 – 60 minutes to allow enough time for you to discuss the areas you would like to improve and identify any barriers to lifestyle change(s).

At the end of the initial meeting, you and your lifestyle coach will agree the level of support you require and also when you would like to make contact again to discuss your progress. Follow up contact may be face to face, a telephone call or even a text message, whichever method is most convenient for you. Your lifestyle coach will be as flexible as possible, within boundaries, to meet your requirements.

As well as contact with your lifestyle coach you will be able to choose from a number of local activities, free of charge, that will help you in achieving your lifestyle change(s). The activities on offer include:

Weight management sessions – Your lifestyle coach can provide you with 12 weeks of free vouchers to a local Weight Watchers group.

Physical Activity Sessions – A free 20 week physical activity programme offering you the opportunity to take part in activities at local venues. These include:

- Walking groups
- Exercise to music
- Gym visits
- Relaxation classes e.g. Tai-chi, yoga and Pilates
- Swimming

You may be entitled to an 'Energiser Plus' card at week 10 of your programme, which will allow you up to 50% discount on many physical activity opportunities across the city.

Cook & Eat 3 practical sessions to increase your knowledge, skills and confidence in making, preparing and cooking healthy food choices.

Think Positive 3 two hour workshops that explore health and well being in relation to your lifestyle.

the lifestyle support programme

Patient Information leaflet

Who should be treated to reduce their cardiovascular health risk?

In general, treatment to reduce the risk of developing a cardiovascular disease is usually offered to people with a high risk. That is:

- People with a cardiovascular risk assessment score of 20% or more. This means, if you have a 2 in 10 chance or more of developing a cardiovascular disease within the next 10 years.
- People with an existing cardiovascular disease (to lower the chance of it getting worse or of developing a further disease).
- People with diabetes. If you have diabetes, the time that treatment is started to reduce cardiovascular risk depends on factors such as: your age, how long you have had diabetes, your blood pressure, and if you have any complications of diabetes.
- People with certain kidney disorders.

What treatments are available to reduce the risk?

If you are at high risk of developing a cardiovascular disease then drug treatment is usually advised along with advice to tackle any lifestyle issues. This usually means:

- Drug treatment to lower your cholesterol level, usually with a statin drug. No matter what your current cholesterol level, drug treatment is advised.
- Drug treatment to lower blood pressure if your blood pressure is high. This is even if your blood pressure is just mildly high.
- A daily low dose of aspirin - depending on your age and other factors. Aspirin helps to prevent blood clots from forming on patches of atheroma.
- Encouragement to tackle lifestyle risk factors. This includes:
- Stop smoking if you smoke.
- Eat a healthy diet.
- Keep your weight and waist in check.
- Take regular physical activity.
- Cut back if you drink a lot of alcohol.

You may be offered a referral to a specialist service if you have a cardiovascular risk ≥ 20% in the next ten years; for example, to the lifestyle programme to help you to lose weight and eat a healthy diet, or to a specialist 'stop smoking clinic'.

What if I am at moderate or low risk?
If you are not in the high risk category, it does not mean you have no risk - just a lesser risk. You may be able to reduce whatever risk you do have even further by any relevant changes in your lifestyle (as described above).

Patient Information leaflet

Understanding cholesterol

You will usually be advised to take a statin drug to lower your cholesterol level if you have a high risk of developing a cardiovascular disease such as heart disease or stroke, or developing diabetes. As a rule, no matter what your cholesterol level is, then lowering the level reduces your risk of these health problems. UK guidelines recommend that all people aged 40 years old or older should have a cholesterol blood test as part of a routine cardiovascular risk assessment.

What is cholesterol?
Cholesterol is a lipid (fat chemical) that is made in the liver from fatty foods that we eat. A certain amount of cholesterol is present in the bloodstream. You need some cholesterol to keep healthy. Cholesterol is carried in the blood as part of particles called lipoproteins. There are different types of lipoproteins, but the most relevant to cholesterol are:

- low density lipoproteins carrying cholesterol - LDL cholesterol. This is often referred to as 'bad' cholesterol as it is the one mainly involved in forming atheroma. Atheroma is the main underlying cause of various cardiovascular diseases (see below). Usually, about 70% of cholesterol in the blood is LDL cholesterol, but the percentage can vary from person to person.

- high density lipoproteins - HDL cholesterol. This is often referred to as 'good' cholesterol as it may actually prevent atheroma formation.

What are atheroma and cardiovascular diseases?
Patches of atheroma are like small fatty lumps that develop within the inside lining of arteries (blood vessels). Atheroma is also known as 'atherosclerosis' and 'hardening of the arteries'. Patches of atheroma are often called 'plaques' of atheroma.

Over months or years, patches of atheroma can become larger and thicker. So, in time, a patch of atheroma can make an artery narrower, which can reduce the blood flow through the artery. For example, narrowing of the coronary (heart) arteries with atheroma is the cause of angina. Sometimes a blood clot (thrombosis) forms over a patch of atheroma, and completely blocks the blood flow. Depending on the artery affected, this can cause a heart attack, a stroke, or other serious problems.

Cardiovascular diseases are diseases of the heart (cardiac muscle) or blood vessels. However, we generally use the term 'cardiovascular disease' to mean diseases of the heart or blood vessels that are caused by atheroma.

NHS
Stoke on Trent

NICE guidelines

NHS
Stoke on Trent

Lipid management

NHS
Stoke on Trent

Diabetes management

NHS
Stoke on Trent

Obesity care pathway

Primary Prevention Programme LES: Option B
Use of PCT staff to implement primary prevention

Introduction

All practices are expected to provide essential, and those additional services they are contracted to provide, to all their patients. This enhanced service specification outlines the more specialised services to be provided. The specification of this service is designed to cover the enhanced aspects of clinical care of the patient, all of which are beyond the scope of essential services. No part of the specification by commission, omission or implication defines or redefines essential or additional services.

The LES is established to recognise additional work other than the normal care of patients in carrying out the primary prevention programme for patients who have a > 25% cardiovascular (CVD) risk in subsequent ten years where they use the PCT Primary Prevention clinical support team instead of a practice staff to undertake primary prevention. The LES is aiming to provide a service initially for those at a risk greater than 25% as the numbers of patients at > 20% CVD risk are too large. This does not alter the recommendations from guidelines that those at a risk > 20% should be offered treatment but the initial priority will be those at CVD risk ≥ 25%.

The LES is designed to reimburse costs to a general practice that initiates primary prevention in line with the PCT's primary prevention programme protocol through the PCT Primary Prevention Clinical Support team providing call, recall and audit services. The LES is designed to help practices to deal with initiation of primary prevention for the backlog of patients identified through the Oberoi software tool. The LES does not cover the on going identification of new cardiovascular high risk patients and the follow up treatment of these patients.

This LES will be reviewed for 2009/10 and 2010/11 and 2011/12. It applies to all 55 general medical practices in Stoke-on-Trent PCT with 147 GPs within the five practice based commissioning (PBC) clusters.

Practices will have to decide whether to opt for either option A use of practice staff to initiate primary prevention or option B for use of PCT Primary Prevention Programme Clinical Team.

Background

The life expectancy gap between England and Stoke is so great that high impact programmes are required at a population level where measures are taken to encourage the whole population to improve lifestyles, and at an individual targeted level focusing on people with high risk of developing long-term conditions. The Local Strategic Partnership (LSP) is developing city wide approaches to improve lifestyles. The ward rankings from the Index of Multiple Deprivation 2004 show that the majority of wards in Stoke on Trent (18 out of 20) fall into the top 20% most deprived wards nationally.

The total population of Stoke-on-Trent is 276,414; of these 132,078 are in the 35-74 year old age group. It is expected that in the region of 16900 people in this age group might be identified by the intended software to be at potentially high risk of CVD; and that nearly two-thirds of these might attend an initial risk assessment arranged by the clinical project assistant acting for the practice. Estimates of numbers of people per practice population with a body mass index > 25, and of those on diabetes and CHD registers have been assessed to calculate potential workload for the primary prevention programme and lifestyle support programme.

The proposed programme is in keeping with the national direction on screening for common diseases announced by the Prime Minister (7 January 2008) and expected focus on cardiovascular screening.

Both the CHD NSF and NICE guidelines recommend the identification and management of adults considered to be at risk of CVD. Statin and aspirin therapy is recommended as part of the management strategy for adults who have a ≥ 20% ten year risk of developing CVD by the Joint British Society Guidelines; statins are recommended by NICE for adults who have > 20% risk of developing CVD (or >15% of developing CHD) over ten years.

Benefits expected are:

1. Improved life expectancy: It is estimated that if 10,000 people take up the CVD primary prevention programme this will lead to around 100 fewer cardiovascular events per year (e.g. death, myocardial infarction).
2. Cost- effective management of those at high risk of developing CVD.
3. Easily accessed lifestyle support for local people that aids the general practice management of patients in terms of primary prevention of CVD and secondary prevention of CHD and diabetes.

Aims of Primary Prevention Programme

1. Identify people registered as patients with general practices in Stoke-on-Trent PCT who are at high risk of cardiovascular disease (CVD) and offer them appropriate medical management and lifestyle support.
2. Refer appropriate patients with significant CVD risk to a lifestyle support programme to underpin the primary prevention programme; and extend primary prevention programme to refer those patients known to have coronary heart disease (CHD) or diabetes or who have recently had cardiac rehabilitation too.
3. Raise awareness of those working with and for general practices in Stoke-on-Trent, their patients and the population at large about the campaign to promote primary prevention of cardiovascular disease; and the existence and potential benefits of the associated lifestyle support programme.

Service Agreement
The PCT

The PCT will employ at least three Clinical Project Support Workers at band 4 who are expected to start working for the project on 1.7.08. If the project progresses well and the majority of practices prefer to host the PCT clinical support workers rather than utilise their own practice staff, then it is intended to employ two more project support workers in September 2008.

The PCT will provide

- IT software to identify patients suitable to be screened by the practice team that can be loaded into the practice computer system. Then provide training for the practice team in loading and utilising the project software tool and set up a primary prevention register of patients (ie untreated patients) with a CVD risk> 25% in next ten years.
- help to establish the practice primary prevention register by seeking personal information about patients who may be at risk, but where the practice does not have sufficient personal information to be able to attribute an individual risk score.

- a clinical project manager (YM or LP) to train and support the practice team in setting up the PCT primary prevention programme protocol – at cluster events or practice-based.
- a clinical support worker expected to be based in the practice to undertake call and review patients with a CVD risk ≥ 25% to the primary prevention programme in line with the PCT project protocol.
- referral to the practice clinical team for treatment of hypertension or raised cholesterol or smoking habit as appropriate.
- referral to the Lifestyle Support Programme if appropriate
- a Primary Prevention Programme / Lifestyle Support Programme toolkit.
- stationary and postage involved in call/recall of patients with CVD risk ≥ 25%.
- reasonable training and development as identified during the project process, as applicable to the PCT's primary prevention protocol
- mentorship and support for the practice team in relation to the initiative
- a clear communication channel for the practice team should a problem arise
- phlebotomy service to which patients are directed to have their blood taken for screening prior to their initial health check up in the practice (if there is a need for additional phlebotomy the PCT will make the necessary arrangements).
- postage costs

The practice

All participating practices will provide:

- care in line with PCT primary prevention guidelines
- suitable accommodation and equipment to carry out screening of patients e.g. BHS approved blood pressure machine, weighing scales and access to computer for clinical / administrative duties. This might include opening in the evenings / weekends to accommodate the project and patient needs. Consumables relevant to the roles of the project support worker e.g. urinalysis sticks
- access to patient information and to input data on to the practice system by the designated PCT clinical support worker.
- appropriate administrative support e.g. to provide access to clinical systems and access to telephone to contact patients
- normal routine care for patients with CHD/diabetes/hypertension in the spirit of the Quality and Outcomes Framework

- a doctor to review screening information, blood tests and associated risk scores and action follow-ups as necessary once an assessment and review has been undertaken by the PCT clinical support worker. The practice clinical team must respond to abnormal clinical findings in line with best practice in ongoing medical management of raised cholesterol, raised blood pressure, smoking habit, overweight or obesity. Specifically in the case of a raised blood pressure detected at the initial assessment by the PCT employed clinical project support worker, follow up with two more blood pressure measurements on separate occasions to establish if there really is a case of hypertension.
- initiate appropriate medication as per Stoke on Trent PCT formulary should patients be identified as requiring treatment. Follow up and titration of medication if prescribed.
- a review of patients at one year.
- support for referral to the Lifestyle Support Programme organised by the PCT clinical project support worker, encouraging individual patients who would benefit to attend or continue on the LSP programme; referring those to the LSP who were initially reluctant to agree but have changed their minds.
- Make available to the PCT data for evaluation

Clinical Governance

The clinical accountability for the PCT primary prevention support team will rest with PCT clinical managers.

Service monitoring

An annual audit will be undertaken as part of the enhanced service contract review by member of PCT staff.

Accreditation

Those doctors who have previously provided services similar to the proposed enhanced service and who satisfy at appraisal and revalidation that they have such continuing medical experience, training and competence as is necessary to enable them to contract for the enhanced service shall be deemed professionally qualified to do so

Termination of Agreement

Either party will be entitled to terminate this agreement by three month's notice if one of the others is in material, serious, or repeated breach of its obligations under this element. Notice should be served in writing on the defaulting partner, specifying the failure to fulfil its obligations and the remedial action that should be undertaken, within a specified time period

If any partner terminates the agreement before the agreement has expired, the agreement value shall be a pro rata proportion of the fee, and any financial adjustment shall be paid. For practices that close down, split, merge or start up in-year, it will be for the PCT to decide with that practice what awards will be made to them in respect of this LES.

If other agreements such as the QOF incorporate primary prevention then the PCT will review the LES to ensure it is not paying twice for such a service.

Costs

Each provider contracted to provide this service will receive a one-off payment of 25p per registered patient for setting up the system for delivering the service as a one off payment when the practice actively starts on the primary prevention programme. Payment will be due when the practice has been actively calling up and reviewing identified patients with a cardiovascular risk ≥ 25% to the initial health check according to the PCT project protocol – for a three month period.

Signature page for Local Enhanced Service

Primary Prevention Programme Option B Use of PCT staff to implement primary prevention 2008/9

For or on behalf of the Commissioner

For or on behalf of the practice
(Please stamp):

Stoke on Trent PCT
Herbert Minton
London Road
Stoke-On-Trent
ST4 7PZ

Signed ……

Date ……

Name ……

Designation ……..

Signed: ……

Date: ……

Name: ……..

Designation……

The following two case scenarios offer examples of how the Lifestyle Support Programme could support your practice population.

Case scenarios

1. Bob- Identifying people at risk of developing diabetes

(We know from the United Kingdom Prospective Diabetes Study (UKPDS1990) that approximately half the people with newly diagnosed diabetes were already showing complications from their condition, which suggested that the condition had been present but undiagnosed for 5-10 years. The progress from normal glycaemia to diabetes (type 2) is gradual, so it is important that health care professionals try to identify possible 'at risk' people and diagnose the pre-diabetes state (fasting blood glucose 6.1-6.9 mmol/L) and offer advice and support to reduce the chances of the person developing diabetes.)

Bob, aged 53 years old, has attended for his primary prevention health check. He is currently being treated for hypertension; his blood pressure is well controlled at 131/82 mmHg. He has attended for routine blood testing prior to his appointment.

At the initial health check, his history and blood results appear to indicate that he has a collection of risk factors, which indicate the metabolic syndrome, which includes impaired fasting glucose, dyslipidaemia, central obesity as well as his previously diagnosed hypertension. All these risk factors culminate in an increased CVD risk in the next 10 years. In order to assess Bob's glycaemic state, you order a repeat fasting glucose and this is reported as being 6.2 mmol/L. (Diabetes is confirmed when two fasting blood glucose levels are ≥7 mmol/L, so this result does not fall into this category. However, the result is not normal as it is over 6.1mmol/L. These results show that Bob may have an abnormal glucose metabolism, with all the increased risks associated with this.)

How will you manage him? It would be easy to give some dietary advice and diet sheets and send him on his way. There is good evidence to suggest that impaired fasting glucose levels respond to lifestyle changes; so by advising Bob to lose weight, become more active and increase his muscle mass will have an impact on the way his body utilizes glucose. He is motivated to lose some weight as he is in a new relationship and is embarrassed by his 'beer belly'. It is important that Bob understands that these recommendations will have a life changing impact on his future health. This will include helping him to understand the way in which his body will improve the way it deals with blood sugar levels, leading to healthier glucose metabolism in the future. He needs to understand that building up muscle will help to increase the amount of sugar that is removed from the blood stream, so helping to reduce his high blood sugars. Bob will also benefit from dietary advice, and being made aware of low fat and sugar options.

As Bob is motivated to alter his lifestyle a referral to the local lifestyle coach will be arranged, offering personalized support to help achieve his goals. Bob will need to be supported and monitored to assess his future risks, so follow up appointments need to be arranged with the practice nurse to repeat his blood pressure, waist circumference, body mass index, blood tests and to maintain motivation to lead an active lifestyle.

Reference: Manley SM, Meyer LC, Neil Haw. UK prospective Diabetes Study 6. Complications in newly diagnosed type 2 diabetic patients and their association with different clinical and biochemical risk factors. Diabetes Res. 1990; 13:1-11.

2. Anne - Identifying people with a cardiovascular risk ≥ 25%: then what?

Anne is obese and has not had her blood pressure measured for several years and is rather depressed. Anne is identified as having a raised cardiovascular risk, when the PCT project support worker runs the search on the patient population aged 34 – 75 years old for practice X. The project support worker looks at Anne's medical records and decides that she needs her blood checked (which according to the PCT protocol is for a general screen, fasting glucose, fasting lipids and thyroid function tests) before she is seen for a health check in the practice by the support worker.

When she comes to the practice for the health check the blood test results are back, and the project support worker can see that she has fasting total cholesterol of 6.5mmol/L, a fasting glucose of 5.8mmol/L, normal thyroid function and general screen. At the health check, the project support worker notes that Anne's blood pressure is raised at 168/97mmHg (right arm) and 175/102mmHg (left arm) taken with a large sized cuff- as Anne is obese with a body mass index (BMI) of 34. The project support worker notes that Anne smokes (has done for 20 years since age 15 years old) and that her waist measures 126 cms. Her only exercise is walking to the corner shop down the road as she travels in her car to her work as an office secretary, where she sits more or less all day at her desk. Anne does seem to be motivated to change, judging from her motivation test score.

So the project support worker discusses the benefits of the lifestyle support programme with Anne, and refers her to the lifestyle coach, Jed, who can see her the following week at a time that suits Anne. Anne books in to see the practice nurse for her blood pressure to be retaken a fortnight later, and resolves to discuss what help she can get with giving up smoking from the practice nurse- she's heard of patches and all that on Signal radio. The project support worker has made her feel that there's hope – she should be able to get help with losing weight, and for her depression- she really does not want to take tablets which is the only treatment she's been offered before by her GP.