Services for the prevention of cardiovascular disease

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Executive summary

To print a PDF or Word version of this commissioning guide click on the ‘Select chapters to save or share’ icon above the contents menu.

This guide supports commissioners of services that contribute to population-wide, community-level and individual approaches to cardiovascular disease prevention.

Commissioners and other stakeholders should adopt an integrated approach to commissioning for the prevention of cardiovascular disease. When planning services across a locality, commissioners should liaise with health and wellbeing boards to ensure that services are commissioned in line with priorities identified in the local Joint Strategic Needs Assessment and Health and Wellbeing Strategy. This is because effective commissioning for the prevention of cardiovascular disease may contribute to behaviour change and outcomes that also help to reduce the incidence of other non-communicable diseases such as diabetes, chronic kidney disease, chronic obstructive pulmonary disease and some cancers.

In this guide commissioners are asked to consider the invest-to-save potential of commissioning a range of interventions to prevent modifiable risk factors associated with the prevention of cardiovascular disease and design their services accordingly. Commissioners are encouraged to ring-fence and pool budgets to implement an integrated local strategy to prevent cardiovascular disease.

The guide for commissioners describes the following service components required to deliver a high-quality service:

- population-wide and community-level approaches (section 4.1)
- assessing an individual's risk of cardiovascular disease, including commissioning the NHS Health Check programme and Making Every Contact Counts (section 4.2)
- behaviour change and lifestyle interventions (section 4.3)
- medical interventions (section 4.4).
Each section offers service models, including Commissioning for Quality and Innovation (CQUIN) examples for driving improvements to cardiovascular disease prevention services and models for meeting Quality, Innovation, Productivity and Prevention (QIPP) requirements.

**Section 3** contains further information to help commissioners to assess levels of cardiovascular disease and modifiable cardiovascular disease risk factors in their population.

**Section 5** provides an outline service specification to assist commissioners when tendering for or contract-managing cardiovascular disease prevention services.

The guide contains a commissioning and benchmarking tool that can be used to model the costs and savings associated with integrated commissioning of cardiovascular disease prevention services. The tool demonstrates how the risk of cardiovascular disease events can be reduced by successful uptake of lifestyle changes using evidence-based interventions at population-wide, community-wide and individual levels.
1 Commissioning services for the prevention of cardiovascular disease

Cardiovascular diseases are diseases of the heart (cardio) or blood vessels (vascular). The underlying cause of most cardiovascular disease is the build-up of atheroma – fatty deposits lining the arteries – which can narrow the arteries or cause a blood clot (local thrombosis). Atheroma can contribute to a range of conditions including:

- heart disease – including myocardial infarction (heart attack), angina and chronic heart failure
- cerebrovascular disease – stroke and transient ischemic attack (TIA)
- peripheral arterial disease[^1].

Commissioners should note that commissioning evidence-based interventions and services for the prevention of cardiovascular disease may also help prevent other non-communicable disease, including type II diabetes, chronic kidney disease, chronic obstructive pulmonary disease and some cancers.

Cardiovascular disease is the biggest public health burden in England (see box 1). Prevention should be a primary focus for local authority and clinical commissioners.

Box 1 Public health burden of cardiovascular disease

[^1]: [^1]

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Cardiovascular disease is the country’s biggest killer, causing more than 200,000 deaths per year – or around 1 in 3 deaths.\(^a\)

Around 4.9 million people aged 16 or older in England have cardiovascular disease, or 11.73% of the population.\(^b\)

There were 1.4 million hospital admissions related to cardiovascular disease in 2010/11. Of these, around 60% were for people younger than 75 and more than 50% of admissions were as an emergency.\(^c\)

In more than 90% of cases, the risk of a first heart attack is related to nine modifiable risk factors. These are:

- high blood cholesterol (lipids)
- smoking and tobacco use
- overweight and obesity
- high blood pressure (hypertension)
- poor diet
- insufficient physical activity
- psychosocial stress
- diabetes
- excess alcohol consumption.

The prevalence of cardiovascular disease increases with deprivation and is more common among people from some black and minority ethnic groups, including people of South Asian, African and African-Caribbean descent.\(^d\)

The combined cost of cardiovascular disease to the NHS and UK economy is estimated at £30 billion.\(^e\) Preventing cardiovascular disease may also reduce the burden on social care, families and carers by preventing long-term illness and disability from heart attacks, strokes and other conditions caused by cardiovascular disease.

Obesity is a major cause of cardiovascular disease. Currently 1 in 3 adults and children are overweight or obese. By 2050 these figures are projected to rise to 9 in 10 adults and 2 in 3 children, at a cost of £50 billion per year.\(^f\)
Every person has some level of cardiovascular disease risk but the relative level of risk varies between individuals as a result of a range of modifiable and fixed risk factors. Figure 1 demonstrates a strong correlation between modifiable individual risk factors and the interventions to manage risk, both at population and individual level. Managing modifiable cardiovascular disease risk factors also helps to prevent other non-communicable disease, particularly diabetes and chronic kidney disease.

Figure 1 The prevention and management of cardiovascular disease
1.1 Commissioning for outcomes

Commissioners should refer to the NHS outcomes framework, the Public health outcomes framework for England, 2013–2016, Adult social care outcomes framework, Commissioning outcomes framework (COF) and Quality and outcomes framework (QOF) when commissioning cardiovascular disease prevention services.

It was the consensus of the Topic Advisory Group that commissioning services for the prevention of cardiovascular disease will contribute to achieving the national and local level outcomes set out in table 1.

Table 1 National and local outcomes of commissioning services for the prevention of cardiovascular disease
| **Reduction in under-75 mortality from cardiovascular disease** – NHS outcomes framework improvement area 1.1 |
| **Increased healthy life expectancy** – Public health outcomes framework outcome 1 |
| **Reduced differences in life expectancy and healthy life expectancy between communities** – Public health outcomes framework outcome 2 |

| Public health outcomes framework | Social care outcomes framework | Other local outcomes |
**Improvements against wider factors that affect health and wellbeing and health inequalities (domain 1)**

Indicator: utilisation of green space for exercise/health reasons

**People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities (domain 2)**

Indicator: alcohol-related admissions to hospital

Indicator: diet

Indicator: excess weight in adults

Indicator: proportion of physically active and inactive adults

Indicator: smoking prevalence – adult (over 18s)

Indicator: recorded diabetes

**Delaying and reducing the need for care and support (domain 2)**

Indicator to be confirmed: effectiveness of prevention/preventative measures

**Improved identification of people who are at risk of cardiovascular disease**

QOF indicator PP1: In those patients with a new diagnosis of hypertension (excluding those with pre-existing coronary heart disease, diabetes, stroke and/or TIA) recorded between 1 April to 31 March: the percentage of patients aged 30 to 74 years who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within 3 months of the initial diagnosis) using an agreed risk assessment tool.

**Reduction in cardiovascular disease risk factors at an individual level**

QOF indicator NM26: In those patients with a new diagnosis of hypertension aged 30-74 years, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an agreed risk assessment tool) of > 20% in the preceding 15 months: the percentage who are currently treated with statins (unless there is a contraindication)

QOF indicator PP2: The percentage of people diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet.

**Improved engagement of people who are under-represented in their access of primary healthcare services**
<table>
<thead>
<tr>
<th>Indicator: take up of the NHS Health Check programme - by those eligible</th>
<th>Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities (domain 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator: mortality from all cardiovascular diseases (including heart disease and stroke)</td>
<td></td>
</tr>
</tbody>
</table>


2 An integrated approach to commissioning high-quality services for the prevention of cardiovascular disease

Figure 2 summarises the scope of this guide, which covers population-wide, community-level and individual approaches to cardiovascular disease prevention (see box 2 for definitions). Studies have shown that combining population, community and individual approaches can reduce cardiovascular disease mortality. Local Government Improvement and Development, the Department of Health and the Cardio and Vascular Coalition recognise that a combination of approaches is needed to ensure sustained lifestyle and behaviour change.

Box 2 Definitions of approaches

- **Population-wide approaches** aim to change the risks from the social, economic, material and environmental factors that affect an entire population. This can be achieved through regulation, legislation, subsidy and taxation or rearranging the physical layout of communities.

- **Community-level approaches** are targeted at groups of people who are at high risk of cardiovascular disease (for example a specific black and minority ethnic group or geographical area) and may include activities to change health behaviours among the group.

- **Individual approaches** are interventions that give people direct encouragement to change their behaviour. This may involve providing information about the health risks of their current behaviour, offering advice or prescribing a treatment.

Commissioners should work with service providers to carry out baseline assessment of relevant NICE guidance (see box 1). This will enable commissioners to identify where recommendations from NICE guidance have been implemented and highlight areas for improvement. Commissioners are encouraged to ask providers to conduct regular clinical audits to monitor and improve the management of cardiovascular disease risk.

**Figure 2 An integrated approach to cardiovascular disease prevention**


3 Assessing service levels for cardiovascular disease prevention

Commissioners and their partners should examine local need for cardiovascular disease prevention, identify gaps in service provision, plan sufficient capacity and develop accessible and inclusive services. A local needs and assets assessment for the prevention of cardiovascular disease should include:

- the number of people who are diagnosed with cardiovascular disease (see section 3.1)
- the number of people with modifiable and fixed risk factors (see section 3.2)
- existing practice, community assets and optimal local practice (see section 3.3).

3.1 Prevalence of cardiovascular disease

Defining the prevalence of cardiovascular disease is complex because there are different definitions of the disease and its component conditions are often comorbid. The prevalence of cardiovascular disease has been estimated here using the Public Health Observatory 'Modelled estimate of prevalence of CVD in England'. In this model a person is defined as having cardiovascular disease if they have had diagnosed angina, myocardial infarction (heart attack), transient ischaemic attack or stroke.

Using the above model, the indicative benchmark rate for the number of people with cardiovascular disease is 11,730 per 100,000 population aged 16 years or over. It is therefore estimated that 4.9 million people aged 16 or over in England have cardiovascular disease, which is 11.73% of the population.

The Public Health Observatory model covers both local authority and primary care trust levels. The model takes into account age, gender, ethnicity, smoking status and deprivation. Commissioners should explore local prevalence and incidence of cardiovascular disease and use information on modifiable and non-modifiable risk factors to consider how local rates may be reduced by implementing a cardiovascular disease prevention programme.
3.1.1 Hospital episode statistics

It is estimated that there were around 1.4 million hospital episodes for cardiovascular disease in 2010/11\(^1\). Of these, around 60% were for people younger than 75 and more than 50% of admissions were as an emergency.

Cardiovascular disease is a major cause of premature death, with a quarter of deaths being before the age of 75\(^1\). A high number of hospital episodes for diseases of the circulatory system, including those that result in death, involve a long length of stay\(^\text{[a]}\). Reducing the number of cardiovascular events by preventing cardiovascular disease could reduce premature mortality from cardiovascular disease and cardiovascular disease-related hospital admissions, and also reduce length of stay.

It should be noted that a proportion of all hospital activity for cardiovascular disease will be from non-modifiable, or fixed, causes, which may not be influenced by preventing modifiable cardiovascular disease risk factors.

3.2 Epidemiology of cardiovascular disease risk factors

The risk of a future cardiovascular disease event can be calculated using modifiable and fixed risk factors, and people at greater risk can be identified. For example:

- cardiovascular disease predominantly affects people older than 50 and risk increases significantly with age\(^\text{[a]}\)
- cardiovascular disease is strongly associated with low income and social deprivation
- the lifetime burden is greater in women because of their longevity and their increased risk of stroke over the age of 75\(^\text{[a]}\)
- South Asian men are more likely to develop cardiovascular disease at a younger age
- family history of premature coronary heart disease identifies a possible genetic predisposition\(^\text{[a]}\).

There is strong evidence that a multifactorial approach that addresses a range of modifiable cardiovascular disease risk factors will yield the most benefit to commissioners and have the greatest impact on population outcomes\(^\text{[a]}\).
The Interheart study identified nine modifiable risk factors for myocardial infarction (see table 2)\(^{[13]}\). These nine risk factors are used here as a proxy for modifiable cardiovascular disease risk, as they were in NICE public health guidance \(^{25}\) on the prevention of cardiovascular disease.

The modifiable risk factors and the proportion of the population with each risk factor are shown in table 2. The table includes NICE-recommended interventions to reduce risk. Further information about each modifiable risk factor is provided later in this section.

**Table 2 Nine modifiable risk factors for myocardial infarction in adults (aged 16 or over)**

<table>
<thead>
<tr>
<th>Population attributable risk(^{[i]})</th>
<th>Risk factor</th>
<th>Measure and Source</th>
<th>England prevalence</th>
<th>Interventions to reduce risk</th>
</tr>
</thead>
</table>
| 63.4% | Abdominal obesity | Raised waist circumference\(^{[i]}\) | 40% | Dietary and weight management interventions, physical activity services (section 4.3)  
Medical interventions (section 4.4) |
| 44.6% | Abnormal lipids (cholesterol) | Cholesterol level above 5.0 mmol/litre\(^{[i]}\) | 34.5% | Dietary interventions (section 4.1 and 4.3)  
Medical interventions (section 4.4) |
| 38.9% | Psychosocial factors\(^{[i]}\) | 'High' GHQ12 score of 4 or more \(^{[i]}\) | 15% | Not applicable\(^{[i]}\) |
| 38.4% | Regular physical activity | Proportion of population not meeting exercise guidelines\(^{[i]}\) | 66% | Encourage modifications to physical environment and physically active travel (section 4.1)  
Physical activity services (section 4.3) |
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Condition</th>
<th>Intervention</th>
<th>Bulletin Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.3%</td>
<td>Smoking or tobacco use</td>
<td>Current smokers</td>
<td>section 4.1</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>Smoking cessation approaches including illicit tobacco control</td>
<td></td>
</tr>
<tr>
<td>21.9%</td>
<td>High blood pressure (hypertension)</td>
<td>High blood pressure</td>
<td>section 4.3</td>
</tr>
<tr>
<td>30.2%</td>
<td></td>
<td>Behaviour change and lifestyle interventions</td>
<td></td>
</tr>
<tr>
<td>18.7%</td>
<td>Alcohol consumption: drinking over recommended levels at least 1 day a week</td>
<td>Excess alcohol consumption</td>
<td>section 4.3</td>
</tr>
<tr>
<td>34%</td>
<td></td>
<td>Behaviour change and lifestyle interventions</td>
<td></td>
</tr>
<tr>
<td>15.0%</td>
<td>Diabetes</td>
<td>Diagnosed and undiagnosed diabetes</td>
<td>section 4.3</td>
</tr>
<tr>
<td>7.3%</td>
<td></td>
<td>Behaviour change and lifestyle interventions</td>
<td></td>
</tr>
<tr>
<td>12.4%</td>
<td>Diet, including food high in fat, salt and sugar</td>
<td>Not consuming five portions of fruit or vegetables daily</td>
<td>section 4.1</td>
</tr>
<tr>
<td>74%</td>
<td></td>
<td>Strategies to reduce population-wide salt intake</td>
<td></td>
</tr>
</tbody>
</table>
The Interheart study demonstrated that these nine measureable and potentially modifiable risk factors account for more than 90% of the population attributable risk (PAR)\(^\text{(14)}\) of an initial acute myocardial infarction. The effect of these risk factors is consistent in men and women, and according to age and ethnic group. The effect of the risk factors is higher in younger men and women, indicating that most premature myocardial infarction is preventable\(^\text{(15)}\). An alternative to PAR is odds ratio\(^\text{(16)}\) to rank the modifiable risk factors. This, along with relative risk reduction is examined further in the commissioning and benchmarking tool.

### 3.2.1 Number of people with a risk factor for cardiovascular disease

An individual can have more than one risk factor for cardiovascular disease. Attempting to quantify the proportion of the population with at least one risk factor is complex. We have used primary care data from the IMS disease analyser\(^\text{(17)}\) to estimate the overall number of people with a risk factor. For this estimate we considered people aged 18 or over who have at least one of the following risk factors:

- abnormal lipids (cholesterol above 5.0 mmol/litre)
- smoking or tobacco use
- obesity
- high blood pressure (hypertension)
- diabetes

\(^\text{(1)}\) Population attributable risk of acute myocardial infarction associated with risk factor in western Europe population after adjustment for smoking, age and gender.


\(^\text{(3)}\) Derived from a sample of GP practice systems, IMS disease analyser, 2011 (see section 3.2.1)

\(^\text{(4)}\) There is uncertain evidence about the link between psychosocial stress and modifiable cardiovascular disease risk, and a lack of evidence that interventions to reduce psychosocial stress can reduce individual risk.

Five factors were selected rather than the nine used elsewhere in this guide because data for these factors were more reliable\textsuperscript{[n]}.

It is estimated that around 23.5 million people\textsuperscript{[n]} in England aged 18 or over have at least one of the five listed risk factors for cardiovascular disease. That is 57.1\% of the adult population, or 57,100 people per 100,000 population aged over 18.

This increases to around 80\% of the population aged 55 or over, and around 84\% of the population aged 65 or over.

3.2.2 Obesity and abdominal obesity

The Interheart study\textsuperscript{[13]} identified that body-mass index is related to risk of myocardial infarction, but this relationship was weaker than that of abdominal obesity (raised waist circumference). The 2010 Health Survey for England reported that 40\% of adults have raised waist circumference\textsuperscript{[n]}. This figure is nearly double that reported in 1993, which was 23\% of the adult population.

The 2010 Health Survey for England also reported that 26.1\% of the adult population (aged 16 or over) were obese (BMI 30 or more), and 36.7\% were overweight (BMI 25–30). The prevalence of obesity in adults rose from 13\% of men in 1993 to 26.2\% in 2010, and from 16\% of women in 1993 to 26.1\% in 2010. The rate of increase of obesity for both genders has gradually reduced since 2001, although the trend is still upwards. Prescribing for obesity and rates of bariatric surgery have been increasing significantly\textsuperscript{[21]}. Rising rates of overweight and obesity are likely to have a significant impact on population-level cardiovascular disease risk in the future\textsuperscript{[22][23]}.

3.2.3 Abnormal lipids: high cholesterol

Abnormal lipids, measured by testing blood cholesterol, are a key modifiable risk factor for cardiovascular disease. Blood cholesterol can be reduced by dietary change, physical activity and medical interventions. Data from IMS disease analyser shows that the prevalence of cholesterol levels above 5.0 mmol/litre in the adult population has decreased significantly in recent years\textsuperscript{[n]}, and was 34.5\% of the population in 2011.
3.2.4 Psychosocial stress

There is uncertain evidence about the link between psychosocial stress and cardiovascular disease risk, and a lack of evidence that interventions to reduce psychosocial stress can reduce an individual's risk of cardiovascular disease.

Living a stressful life can cause people to adopt habits such as smoking and poor diet, which in turn are risk factors for cardiovascular disease\(^1\). The Interheart study found that exposure to psychosocial stressors is associated with increased risk of acute myocardial infarction.

3.2.5 Physical activity levels

Increased physical activity can lower the risk of cardiovascular disease. Trend data from the Health Survey for England in figure 3 show the percentage of adults at each activity level (16 years or over). The number of people meeting recommendations\(^2\) for exercise has been increasing in recent years; however, two-thirds of adults still do not meet the recommendations.

![Figure 3 Adult trend: meeting recommendations for exercise](image)

3.2.6 Smoking and tobacco use

Smoking is among the most significant modifiable risk factors for cardiovascular disease. Although rates of smoking have been declining in recent decades, in 2010 around 20% of adults...
aged 16 years or over in England were current smokers\textsuperscript{[3]}\textsuperscript{[34]}. This is equivalent to 8.7 million adults in England, or 21,200 per 100,000 adults.

Smoking rates are much higher in some social groups, including those with the lowest incomes, and these groups suffer the highest burden of smoking-related illness and death. Smoking is the single biggest cause of inequalities in death rates between the richest and poorest communities\textsuperscript{[43]}. There is a strong association between smoking and mental health disorders. Overall smoking prevalence among psychiatric patients is two to three times higher than among the general population\textsuperscript{[43]}.

The type of tobacco consumed varies between ethnic groups, with water pipes and smokeless tobacco more commonly used in Middle Eastern and Asian populations\textsuperscript{[30]}.

### 3.2.7 High blood pressure (hypertension)

Hypertension is a major risk factor for cardiovascular disease. Untreated hypertension is usually associated with a progressive rise in blood pressure. The vascular and renal damage that this may cause can culminate in a treatment-resistant state. The 2010 Health Survey for England reported that 30.2% of adults aged 16 or over had high blood pressure. Of these, 19.6% reported that the condition was untreated or uncontrolled. 2009/10 QOF data showed that 13.4% of the population has diagnosed hypertension.

The NHS Information Centre report Statistics on obesity, physical activity and diet: England, 2010 reported that overweight or obese adults aged 16 or over were more likely to have high blood pressure than those in the normal weight range. Other risk factors for raised blood pressure include high salt intake, lack of physical activity and excess alcohol intake.

### 3.2.8 Alcohol

Excessive alcohol consumption is linked to an increased risk of cardiovascular disease (see table 2). The Health Survey for England reported that 41% of men and 28% of women (34% overall) drank more than the recommended levels on at least 1 day in the week prior to the survey\textsuperscript{[43]}.

Using the AUDIT criteria, the Adult Psychiatric Morbidity Survey (APMS)\textsuperscript{[6]} found that hazardous and harmful drinking\textsuperscript{[6]} is common in England:
The rate of hazardous drinking is around 24.2% or 24,200 per 100,000 of the population aged 16 and over.

The rate of harmful drinking is around 3.8% or 3,800 per 100,000 of the population aged 16 and over. Two-thirds of harmful drinkers show signs of alcohol dependence.

### 3.2.9 Diabetes

Being diagnosed with, or being at risk of, diabetes is a risk factor for cardiovascular disease. QOF data for 2010/11 showed that 5.5% of the population aged 17 and over in England have diagnosed type I or II diabetes mellitus. The Public Health Observatory Diabetes Prevalence Model for England estimates the number of people aged 16 or over who have diabetes (diagnosed and undiagnosed) adjusted for age, gender, ethnic group and deprivation. This model estimates that 7.3% of people in England have diabetes.

Type II diabetes is the more common type and around 90% of people with diabetes have this type. Type II diabetes is often linked with being overweight or obese. It usually appears in people aged 40 or over. However, in South Asian and African-Caribbean populations it often appears in people aged 25 or over[34].

It should be noted that although type I diabetes is non-modifiable it should still be well managed in order to prevent complications from developing.

### 3.2.10 Diet

A diet high in saturated fat is linked to raised cholesterol, which is a key risk factor for cardiovascular disease. The 2011 National Diet and Nutrition Survey reported that mean saturated fat intakes for all age groups exceed the recommended fat level of no more than 11% of food energy. The mean saturated fat intake for adults aged 19 to 64 was 12.8% of food energy. However, mean intakes of trans-fatty acids provided 0.7–0.9% of food energy for all age groups, which was within the recommendation of no more than 2% of food energy.

The 2010 Health Survey for England reported that just 26% of adults aged 16 or over consumed five portions of fruit or vegetables daily. A diet rich in fruit and vegetables confers protective effects against the development of cardiovascular disease and certain cancers. A meta-analysis of 13 cohort studies found that intakes of more than five portions of fruit and vegetables a day were associated with a 17% reduction in coronary heart disease risk, and intakes of 3–5 portions
per day were associated with a more modest decrease in coronary heart disease risk (7% reduction).\[n\]

NICE public health guidance 25 states that high levels of salt in the diet are linked with high blood pressure. This can lead to stroke and coronary heart disease. It recommends a reduction in salt intake among the population, aiming for a maximum intake of 6 g per day per adult by 2015 and 3 g by 2025. The 2008 Urinary Sodium Survey assessed salt intakes in the general adult population in the UK. The survey showed a reduction in the UK’s average daily salt consumption from 9.5 g to 8.6 g since the National Nutrition and Diet Survey (NDNS) in 2000/01.

3.2.11 Deprivation and cardiovascular disease

There are strong links between deprivation and cardiovascular disease.

NICE public health guidance 15 on reducing the rate of premature mortality from cardiovascular disease and other smoking-related diseases focuses on primary care practitioners undertaking outreach work or ‘proactive case finding’ to identify adults who are at higher risk and disadvantaged.

The Care Quality Commission publication ‘Closing the gap’ states that modifiable cardiovascular disease risk factors are less likely to be diagnosed in people living in more deprived areas, which may result in poorer access to treatment. The National Service Framework for Coronary Heart Disease found that there are inequalities in the effects of heart disease, for example prevalence is almost three times higher among unskilled men than among professional men.

3.3 Current and optimal local practice

Barton et al's 2011 study on the effectiveness and cost effectiveness of cardiovascular disease prevention in whole populations looked at a programme of cardiovascular disease prevention across England and Wales. The report concludes that reducing cardiovascular disease events by just 1% a year would deliver savings to the health service of at least £30 million a year compared with no additional intervention. It would also be likely to have cost savings for social care. In addition:
Reducing mean cholesterol concentrations or blood pressure levels in the population by 5% would result in annual savings of £80 million to £100 million. Improvements at this level have been demonstrated by studies in Finland and the USA\cite{36,37}.

Actions to reduce dietary salt intake by 3 g a day (current mean intake approximately 8.5 g a day\cite{38}) would prevent approximately 30,000 cardiovascular events, with savings of at least £40 million a year\cite{39}.

Actions to reduce intake of industrial trans-fatty acid by approximately 0.5% of total energy content might gain around 570,000 life years and generate NHS savings of at least £230 million a year\cite{34}.

Furthermore there is evidence that smoking cessation would deliver significant savings to the health service:

- In 2010 there were around 157,000 cardiovascular deaths in England\cite{40}. A reduction in smoking prevalence of 5% would lead to around 3800 fewer smoking-attributable deaths per year\cite{41}.

- In 2010/11 there were approximately 83,000 emergency hospital admissions\cite{42} attributable to cerebrovascular diseases in adults aged 35 years or over\cite{36}. A reduction in smoking prevalence of 5% would lead to around 2400 fewer hospital admissions per year\cite{37}.

Other studies have shown that a population approach can have a significant impact on cardiovascular disease, and small differences can have a large effect. A recent study\cite{43} showed that adopting four additional healthy lifestyle behaviours was associated with a fourfold difference in mortality, equivalent to 14 years in chronological age.

### 3.4 Conclusion

Based on the epidemiological data and other information outlined above:

- Around 4.9 million adults in England have diagnosed cardiovascular disease; that is 11,730 per 100,000 population aged 16 or over.

- Around 23.5 million people in England aged 18 or over have at least one risk factor for cardiovascular disease; that is 57.1% of the adult population.
• Tackling the risk factors of cardiovascular disease has been shown to reduce the future incidence of cardiovascular events.

• Reducing cardiovascular events by just 1% would result in cost savings to the health and social care systems.

Commissioners should use their local needs assessment to determine optimum levels for local service provision. Commissioners should note that the benchmark rates do not represent NICE’s view of desirable, or maximum or minimum, service levels.

Commissioners should use this benchmark and local data to facilitate local discussion on optimum service levels. There is considerable variation in the number of people with cardiovascular disease. This is influenced by the population risk factor profile as well as the social, economic and demographic profile of the local population, so commissioners are encouraged to consider local assumptions.

Use the prevention of cardiovascular disease commissioning and benchmarking tool to determine the level of service that might be needed locally and to calculate the cost of commissioning the service using the indicative benchmark and/or your own local data.


[8] This is estimated from Hospital Episode Statistics (HES), which show that there were 1.4 million finished consultant episodes for 'all diseases of the cardiovascular system'. Cardiovascular disease is defined here as 'all ICD-10 codes in Chapter IX – Diseases of the circulatory system (I00–I99)' (from the 2012/13 NHS outcomes framework technical appendix). An inpatient or daycase episode is where the patient has completed a period of care under a consultant/midwife/consultant nurse and is either transferred to another consultant/midwife/consultant nurse or discharged.


[10] This is examined further in the NICE guide for commissioners on end of life care for adults.


PAR is the portion of the incidence of a disease in the population (exposed and non-exposed) that is due to exposure. It is the incidence of a disease in the population that would be eliminated if exposure were eliminated.


The odds ratio is a way of comparing whether the probability of a certain event is the same for two groups. An odds ratio of 1 implies that the event is equally likely in both groups. An odds ratio greater than one implies that the event is more likely in the first group. An odds ratio less than one implies that the event is less likely in the first group.

The IMS disease analyser collects data from a sample of around 100 GP practice systems, with about 2.7 million patient records. The sample includes practices from England, Wales, Scotland and Northern Ireland and has a representative UK sample by age and sex. The database holds significant clinical events relating to any period in a patient's life that has been summarised into computer records by the practice. As in any observational database, data entered by panel doctors may be incomplete.

Reliable risk factors encompass factors with more complete data coverage, giving a more reliable measure of prevalence. The reliable risk factors are abnormal lipids (cholesterol above 5.0 mmol/litre), smoking or tobacco use, obesity, high blood pressure (hypertension) and diabetes.

Raised waist circumference is taken to be greater than 102 cm in men and greater than 88 cm in women.


Meets recommendations: 30 minutes or more of moderate or vigorous activity on at least 5 days a week.


The recommended levels are 3 units of alcohol for women and 4 units of alcohol for men.


Babor, Higgins-Biddle, Saunders. The Alcohol Use Disorders Identification Test Guidelines for Use in Primary Care, World Health Organization AUDIT, Second Edition. General Department of Mental Health and Substance Dependence


Food standards agency, Joint Health Surveys Unit, urinary sodium survey 2008, London.


Primary diagnosis of ICD-10 I60-I69, HESONLINE.


Hospital Episode Statistics 2010/11, emergency admissions for people aged 35 years or older with a primary diagnosis of (I60-I69) in England.

4 Specifying services for the prevention of cardiovascular disease

The key components of services to prevent cardiovascular disease are:

- population-wide and community-level approaches (section 4.1)
- assessing an individual's risk of cardiovascular disease (section 4.2)
- behaviour change and lifestyle interventions (section 4.3)
- medical interventions (section 4.4)
4.1 Population-wide and community-level approaches

Commissioning population-wide and community-level approaches to cardiovascular disease prevention will contribute to the overarching outcomes of:

- reducing under-75 mortality from cardiovascular disease (NHS outcomes framework improvement area 1.1)
- increasing healthy life expectancy (Public health outcomes framework outcome 1)
- reducing differences in life expectancy and healthy life expectancy between communities (Public health outcomes framework outcome 2)

by:

- improvements against wider factors that affect health and wellbeing and health inequalities (Public health outcomes framework domain 1)
- helping people to live healthy lifestyles, make healthy choices and reduce health inequalities (Public health outcomes framework domain 2)
- a reduction in cardiovascular disease risk factors at an individual level.

This section supports the commissioning of population-wide approaches to cardiovascular disease prevention. These include interventions to modify the environment to encourage physical activity, to regulate access to items that increase cardiovascular disease risk such as tobacco, and to reduce the availability of foods that are high in fat, salt and sugar.

This chapter also supports the commissioning of community-level services aimed at population groups with a higher cardiovascular disease risk, such as local black and minority ethnic communities or areas of deprivation.

The Topic Advisory Group emphasised that commissioning population-wide and community-level approaches in accordance with NICE guidance is integral to creating a healthy local environment. An environment that is conducive to making healthy choices affects the likelihood that people will achieve positive outcomes from individual approaches such as an NHS Health Check, behaviour change, lifestyle interventions and medical interventions. However, the Topic Advisory Group agreed that historically the commissioning of population-wide and community-
level approaches has often been neglected or poorly coordinated at a local level, and is an area for improvement.

**Figure 2** demonstrates that population-wide cardiovascular disease prevention programmes require a range of partners to work together to reduce the population's exposure to, and development of, cardiovascular disease risk factors. The health and wellbeing board should ensure that public health teams, regulatory services, planning and procurement are all actively involved in the development and implementation of population-wide and community-based plans to prevent cardiovascular disease, and commissioners should ensure that they allocate resources to commission this work from a range of statutory, private and/or third sector providers as appropriate.

The considerations in [NICE public health guidance 25](#) state that: 'Local advocacy by "third sector" groups and organisations, including the voluntary sector, is an important part of cardiovascular disease prevention activities. For example, it could have an impact on planning applications for fast-food outlets.' The topic advisory group agreed that commissioners should consider supporting local advocacy activities, for example those encouraging local people to get involved in influencing local policy that affects modifiable cardiovascular disease risk factors and the political decisions that affect their health and wellbeing. Commissioners should have regard to recommendation 17 on leadership in [NICE public health guidance 25](#), which states that commissioners should:

- Act as leader and governor of CVD prevention. Identify and articulate local community needs and aspirations and how these may impact on the community's risk of CVD. Reconcile these needs and aspirations or arbitrate on them to help prevent CVD.
- Identify senior figures within PCTs and local authorities as champions for CVD prevention.
- Identify people to lead the CVD programme, including members of the local community. Identify in advance – and provide for – the training and other needs of these potential leaders.
- Develop systems within local strategic partnerships and other subregional or regional partnerships for agreeing shared priorities with other organisations involved in CVD prevention. Ensure senior staff are involved, as appropriate.

[NICE public health guidance 25](#) provides evidence-based recommendations for population-wide approaches to cardiovascular disease prevention at a regional level. Collective or regional
commissioning is shown to have a number of benefits, including economies of scale, integrated commissioning across services and disease pathways and opportunities to share best practice. A number of existing collective commissioning or support organisations may be well placed to contribute to this objective, including cardiac and stroke networks (or equivalent), regional commissioning support organisations, city partnerships and third sector advocacy groups. However, it is also possible to commission population-wide activities at a local level.

Table 3 provides examples of evidence-based population-wide and community-level interventions for cardiovascular disease prevention, covering the spectrum approaches outlined in the Nuffield public health intervention ladder. Commissioners should ensure they commission a range of approaches to cardiovascular disease prevention. Commissioners can use the NICE self-assessment tool for NICE public health guidance 25 to help them determine how close existing practice is to that recommended in the guidance, and should prioritise services that are not currently in place or adequately resourced.

Table 3 Public health intervention ladder of population-wide and community-level interventions for cardiovascular disease prevention

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Definition</th>
<th>Examples</th>
<th>Commissioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate choice</td>
<td>Regulate in such a way as to entirely eliminate choice</td>
<td>Restrict location of takeaways locally</td>
<td>Licensing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Illicit and underage alcohol and tobacco control</td>
<td>Trading standards</td>
</tr>
<tr>
<td>Restrict choice</td>
<td>Regulate in such a way as to restrict the options available to people with the aim of protecting them</td>
<td>Restrict numbers and opening hours of takeaways locally</td>
<td>Licensing</td>
</tr>
<tr>
<td>Guidance choice by disincentives</td>
<td>Specify the use of dietetically appropriate food choices, including low-salt and low-fat products, in settings such as schools, care homes, hospitals and canteens</td>
<td>Procurement</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Financial and other disincentives to influence people to make healthier choices</td>
<td>Implementing congestion charges or increasing parking fees to discourage excess use of cars</td>
<td>Licensing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voluntary code for smoke-free play areas</td>
<td>Public health</td>
<td></td>
</tr>
<tr>
<td>Guide choice by incentives</td>
<td>Regulations can be offered that guide choices by fiscal and other incentives</td>
<td>Free or discounted fruit and vegetables</td>
<td>Public health</td>
</tr>
<tr>
<td></td>
<td>Free or discounted gym membership</td>
<td>Public health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improved spatial planning - safe and sustainable built environment, encouraging use of safe green space, cycling and physical activity</td>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safe and integrated transport plans</td>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td>Guide choice by changing the default policy</td>
<td>For example, in a restaurant, instead of providing chips as a standard side dish (with healthier options available), menus could be changed to provide a more healthy option as standard (with chips as an option available).</td>
<td>Catering within hospitals and council-owned buildings such as leisure centres – influence through tender process</td>
<td>Procurement</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Smoke-free home and car programmes</td>
<td>Public health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enable choice</th>
<th>Enable individuals to change their behaviours</th>
<th>Introduce cycle lanes</th>
<th>Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove restrictions on outside sport</td>
<td>Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with employers to encourage workplace wellbeing</td>
<td>Public health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging spaces for community-food growing and preserve green spaces</td>
<td>Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy food choice, including vending machines</td>
<td>Procurement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provide information</th>
<th>Inform and educate the public</th>
<th>Control of advertising (such as posters, billboards)</th>
<th>Planning and regulatory services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social marketing and health promotion</td>
<td>Public health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do nothing or simply monitor the current situation

[^1]: Taken from Nuffield Bioethics (2007) Chapter 3 Policy process and practice

Commissioners should work with their health and wellbeing board to:
• ensure that information is collected on local knowledge of cardiovascular disease risk factors and used to enable appropriate targeting of population-wide approaches and community-level interventions

• set realistic targets for levels of cardiovascular disease prevention activity and encourage prioritising this in future work programmes

• encourage health outcomes to be used as a measure for the achievements of regulatory and licensing action.

Further resources

Commissioners may wish to refer to the following resources when developing population-wide and community-level approaches to cardiovascular disease prevention:

• The Action on Smoking and Health (ASH) local advocacy toolkit on tobacco is a set of materials for directors of public health to use with executive members to help ensure that tackling tobacco use is high on the local public health agenda. The tools help demonstrate the scale of harm caused locally by tobacco use, the contribution this makes to health inequalities, the cost to local communities, local economies and service providers and evidence of effectiveness of local action on tobacco and health.

4.1.1 Service models

Commissioners may wish to refer to examples of service models (see table 4) for population-wide strategies to prevent cardiovascular disease.

Table 4 Examples of service models for population-wide strategies to prevent cardiovascular disease

<table>
<thead>
<tr>
<th>Examples of service models</th>
<th>Case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Places Programme</td>
<td>The National Heart Forum's Healthy Places Programme contains case studies of community-based and regulatory approaches to reducing population exposure to cardiovascular disease risk factors.</td>
</tr>
</tbody>
</table>
| **Heart of Mersey** | Heart of Mersey is a cardiovascular health charity covering Cheshire and Merseyside. It aims to coordinate a strategic approach to preventing the high rates of cardiovascular disease and associated inequalities in their region. The charity takes a population-based approach to heart disease and stroke prevention.

Its principal activity is working with local organisations to improve access to healthy food and reduce exposure to smoking. Heart of Mersey also works in partnership with national and international organisations to advocate for healthier policy in tobacco control (such as the recent ban on point-of-sale advertising) and food and agricultural production (including advocating for a European Common Agricultural Policy that supports healthier nutrition).

HM Partnerships is Heart of Mersey's social enterprise partner and has been commissioned to undertake various initiatives that may affect heart health. For example, a project in Liverpool to develop interventions to promote healthy eating in pre-school settings. |
| **Get Some Answers – illicit tobacco control** | The North East achieved significant improvements in illicit tobacco control following a large scale education and enforcement programme as part of the Get Some Answers programme. Gateshead Council is running a campaign to report illegal tobacco sales. |
Manchester Food Futures Partnership’s ‘Tasty Not Salty’ project

The project delivered a community-based intervention to encourage healthy salt consumption patterns in South Asian and Caribbean communities in Manchester – aiming for intakes of no more than 6 g of salt each day in adults. Evidence shows that these communities have the greatest risk of high blood pressure and cardiovascular disease.

The project recruited a dedicated community food worker to deliver the main activities of the project. It:

- collected local data on knowledge of salt and health, and on shopping, cooking and eating habits
- delivered practical, fun sessions to raise awareness of the salt content of foods and how this relates to maximum daily amounts
- raised awareness of the effects of salt on health
- advised on practical ways to make long-term reductions in salt consumption
- ran 'cook and taste' sessions with a focus on reading labels to reduce salt.
- published a culturally appropriate South Asian version of the Little Book of Salt, which was translated into 5 languages.

Positive outcomes included developing understanding and practical community contacts with black and minority ethnic groups and successfully raising awareness of the importance of reducing salt consumption. However, it was recognised that ingrained cultural patterns of behaviour could inhibit sustained behavioural change.

The contribution of local policies to cardiovascular disease in Wigan

The report examines the impact of local public policy on cardiovascular disease across the borough of Wigan. The study includes all policy linking and relating to nutrition, physical activity, tobacco and alcohol. The study assesses the potential population health impact of policy modification and considers the potential support for policy change at a local authority level.
These examples are offered to share good practice; NICE makes no judgement on the compliance of these services with its guidance.

4.2 Assessing an individual's risk of cardiovascular disease

Commissioning services to assess an individual's risk of cardiovascular disease will contribute to the overarching outcomes of:

- reducing under-75 mortality from cardiovascular disease (NHS outcomes framework improvement area 1.1)
- increasing healthy life expectancy (Public health outcomes framework outcome 1)
- reducing differences in life expectancy and healthy life expectancy between communities (Public health outcomes framework outcome 2)

by ensuring:

- improved engagement of people who are under-represented in their access of primary healthcare services
- improved identification of people at risk of cardiovascular disease.

This section supports commissioners to commission services that:

- assess an individual's risk of developing cardiovascular disease, using a systematic strategy, supplemented by appropriate opportunistic approaches
- provide cardiovascular disease risk assessments using validated tools
- include high-quality communication of cardiovascular disease risk
- maximise the referral and uptake of lifestyle and behaviour change interventions.

4.2.1 Commissioning systematic cardiovascular disease risk assessment programmes

NICE clinical guideline 67 on lipid modification recommends:

- For the primary prevention of CVD in primary care, a systematic strategy should be used to identify people aged 40–74 who are likely to be at high risk. (Recommendation 1.1.1)
Opportunistic assessment should not be the main strategy used in primary care to identify CVD risk in unselected people. (Recommendation 1.1.6)

Commissioners should ensure that they commission services to systematically assess individual cardiovascular disease risk in their local population.

**NHS Health Check programme**

NHS Health Check is systematic programme for everyone between the ages of 40 and 74 (excluding those who already have vascular disease) that assesses a person's risk of heart disease, stroke, diabetes and kidney disease. Everyone receives lifestyle advice and some go on to have lifestyle and behavioural change and/or medical interventions to reduce their risk of vascular disease. Those who remain disease free are recalled every 5 years for another check.

Phased implementation of the NHS Health Check programme began in April 2009 with primary care trusts responsible for commissioning it, with full roll out from April 2012. Primary care trusts will offer an NHS Health Check to 20% of their eligible population every year. From April 2013, it is anticipated that local authorities will be responsible for commissioning the programme and they will be mandated to ensure that those eligible are offered a risk assessment. A ring fenced budget will be available to local authorities to fund the programme.

Commissioners should ensure that their NHS Health Check programme provides systematic coverage for the eligible population and that the NHS Health Check is provided face-to-face.

Depending on local demography and needs assessment, commissioners may wish to initially prioritise implementing the NHS Health Check in geographical areas or communities with greater need in the early years of the programme; however, all commissioners should work towards universal population coverage within 5 years from April 2012.

Commissioners should ask their NHS Health Check providers to:

- ensure that people are given the appropriate opportunity to manage their cardiovascular disease risk, through lifestyle advice or referral to behavioural change and lifestyle and/or medical interventions
- offer periodic patient reviews according to the person's clinical need and risk of developing cardiovascular disease
• ensure that the outcomes of the NHS Health Check, including the results of the risk assessment and details of any additional tests, referrals or prescribing, are recorded on the person’s primary care patient record.

Commissioners should refer to the following support tools to help them commission the NHS Health Check programme:

• The Department of Health’s NHS Health Check: vascular risk assessment and management best practice guidance

• The Department of Health’s Putting prevention first – vascular checks: risk assessment and management – next steps guidance for primary care trusts

• The Department of Health's NHS Health Check Frequently Asked Questions, which provides clear information on eligibility criteria for NHS Health Check

• NHS Diabetes and Kidney Care's NHS Health Check Ready Reckoner

• NHS Information Centre NHS Health Check Secondary Use Dataset

• National occupational standard: carry out assessment for individuals at risk of developing cardiovascular disease


Assessing cardiovascular disease risk using validated risk equations

Commissioners should clearly specify that all cardiovascular disease risk assessments are made using a validated cardiovascular disease risk assessment equation.

Commissioners should note that most general practices will have cardiovascular disease risk assessment equations installed on their practice system. If the practice risk equation is not validated, commissioners should ask the provider to use an alternative validated tool and disable the non-validated tool.

Where possible, commissioners should seek to agree on a risk equation that will be used by all local providers. This will improve comparison of outcomes between providers and ensure consistency during patient reviews.
Commissioners may wish to refer to the Clinical Knowledge Summary for cardiovascular risk assessment and management for further information about validated risk assessment tools, including the Framingham Equation 1991, Q-RISK-2-2011, Joint British Societies Cardiovascular Risk Assessor and the ASSIGN calculator.

4.2.2 People with an increased risk of cardiovascular disease

Commissioners should ensure that services are available for people who are not eligible for an NHS Health Check, but whose cardiovascular health may be at risk. Examples include people who are older than 74, people with pre-existing vascular disease, and people with a family history of premature mortality from cardiovascular disease.

People younger than 40 or older than 74

Commissioners should ensure that people younger than 40 or older than 74 who may have an increased risk of cardiovascular disease because of modifiable risk factors are given the right advice and support to reduce their risk. Commissioners should ensure that behaviour change and lifestyle intervention providers accept referrals from these groups (see section 4.3) and that the person has access to a cardiovascular disease risk assessment and medical interventions if a healthcare professional believes that this is appropriate (see section 4.4).

People with existing vascular conditions

Commissioners should ensure that they commission services to identify and assess cardiovascular disease risk in people who have an increased risk because of an existing clinical condition. Examples include people with diagnosed hypertension, diabetes and chronic kidney disease, whose condition means they have a higher risk of developing cardiovascular disease.

Commissioners should work with GPs to ensure that people on general practice registers for hypertension, diabetes and chronic kidney disease have their risk of cardiovascular disease assessed by a competent healthcare professional. They should ensure people are offered appropriate lifestyle advice and medical interventions to help prevent cardiovascular disease, which are in line with NICE guidance and complementary to their existing disease pathways and treatment.
When commissioning cardiovascular disease prevention services for people with diabetes and chronic kidney disease, commissioners may wish to refer to the following NICE guides for commissioners:

- **Patient education programmes for people with type 2 diabetes.**
- **Early identification and management of chronic kidney disease.**

### People with suspected familial hypercholesterolemia

Commissioners should understand the benefits of commissioning services for the detection of familial hypercholesterolemia. It is estimated that around 80% of cases of familial hypercholesterolemia are undiagnosed, despite the genetic condition affecting around 1 in 500 people. A family history of premature coronary heart disease is one of the criteria used to detect suspected familial hypercholesterolemia[^a].

The [NICE clinical guideline 67 on lipid modification](https://www.nice.org.uk/guidance/cg67) recommends that:

- People in whom familial hypercholesterolemia or other monogenic disorders are suspected because of a combination of clinical findings, lipid profiles and family history of premature CHD (chronic heart disease) should be considered for further investigation and specialist review. (Recommendation 1.1.25).

In accordance with [NICE clinical guideline 71](https://www.nice.org.uk/guidance/cg71) on familial hypercholesterolaemia commissioners should ensure that they have services in place for further investigation (including cascade testing using genetic and lipid tests as needed) and specialist review of people with suspected familial hypercholesterolemia. They should also ensure that they commission services for people with familial hypercholesterolemia.

Additional support for commissioning services for people with familial hypercholesterolemia can be found in the:

- NICE implementation advice for clinical guideline 71
- HEART UK commissioning toolkit on familial hypercholesterolemia
- HEART UK report ‘Saving lives, saving families: the health, social and economic advantages of detecting and treating familial hypercholesterolemia’
Other high risk groups

The prevalence of cardiovascular disease is higher among people:

- who live in areas of deprivation, due in part to a complex range of psychological and social factors that include poor housing, family breakdown, unemployment and life events
- from some black and minority ethnic groups, including people of African, African-Caribbean and South Asian origins
- with severe mental illness, including schizophrenia and bipolar disorder.

Commissioners should ensure their NHS Health Check programme and other cardiovascular disease prevention services are tailored to the needs of their local population, including high risk or harder to reach groups. They should consider how services can be configured to ensure that high risk groups, who may also have less contact or more disparate contact with primary health care and social care services, can benefit from brief advice and support to prevent cardiovascular disease. They should also ensure equitable access for people with mental health problems, or physical or learning disabilities.

4.2.3 Opportunistic approaches to identify people with an increased risk of cardiovascular disease

Commissioners may wish to supplement their NHS Health Check programme with opportunistic methods of assessing people with an increased risk of cardiovascular disease. Supplementary opportunistic approaches may be suitable for people who have less access or more disparate access to primary healthcare services, and can improve the personalisation of health and social care and support the local implementation of Making Every Contact Count.

The aims of Making Every Contact Count are to encourage health and social care professionals from all specialties to use every contact, regardless of the original purpose or remit of the contact, as an opportunity to discuss the person's wider mental and physical health and wellbeing. Making Every Contact Count provides an ideal opportunity for healthcare professionals to individually tailor healthcare messages based on a discussion of possible cardiovascular disease risk factors in the context of personal circumstances. This may help to
encourage referral and uptake of an NHS Health Check among eligible groups, and improve referrals to behaviour change and lifestyle interventions.

To support local commissioning of opportunistic approaches, commissioners may wish to refer to:

- **NHS Yorkshire and Humber resources for Making Every Contact Count**, which include competence frameworks for prevention and lifestyle behaviour change

- **Healthy living pharmacy pathfinder scheme**.

### 4.2.4 Communicating risk and offering personalised brief advice

Commissioners should ensure that there is consistency in the health messages provided during an NHS Health Check, other cardiovascular disease risk assessments or Making Every Contact Count. Commissioners should ensure that training is available and that health and social care staff are competent to communicate risk and know how to reinforce key health messages in a manner that is personal and tailored to the individual.

**NICE clinical guideline 67** recommends that:

- Adequate time should be set aside during the consultation to provide information on risk assessment and to allow any questions to be answered. Further consultation may be required. (Recommendation 1.2.2)

- People should be offered information about their absolute risk of cardiovascular disease and about the absolute benefits and harms of an intervention over a 10-year period. This information should be in a form that:
  - presents individualised risk and benefit scenarios
  - presents the absolute risk of events numerically
  - uses appropriate diagrams and text.

(See [www.npci.org.uk](http://www.npci.org.uk)). (Recommendation 1.2.4)
The Topic Advisory Group agreed that communication was a key factor in ensuring that people who are identified as having modifiable cardiovascular disease risk factors understand their risk and are motivated to make changes to their behaviour and lifestyle. Commissioners should:

- Encourage service providers to invest in resources that explain risk to people in a tailored manner and in a way that is meaningful to the individual. Examples include visual cues or IT packages.
- Ensure that all cardiovascular disease risk assessment takes place face-to-face. The appointment should include sufficient time to enable communication of risk and allow the person to ask questions. Further time should be scheduled for additional tests, and referral to behaviour change and lifestyle interventions or medical management as appropriate. This time should be made available to everybody, including those with a lower estimated risk who may still be encouraged to make behaviour or lifestyle changes to further reduce their risk.

Commissioners may wish to refer to the following resources on commissioning training and interventions to communicate risk:

- The Department of Health's 'Improving health: changing behaviour' NHS health trainer handbook has evidence-based information on risk communication.
- Cheshire and Merseyside public health network top tips for commissioners and providers of behaviour change training programmes.

### 4.2.5 Maximising referral to, and uptake of, interventions

The Topic Advisory Group agreed that identifying people's risk is a core component in preventing cardiovascular disease. However, its impact on morbidity and mortality from cardiovascular disease can only be realised if people reduce risk through changes to their behaviour and lifestyle (see section 4.3). This may be in combination with medical interventions for people at greater risk of cardiovascular disease (see section 4.4).

Commissioners should:
• Specify that the healthcare professional makes direct referrals to services offering support for behaviour change and lifestyle interventions on behalf of the person, rather than asking the person to make their own referral.

• Monitor the numbers of people who are referred to services and the numbers who do and do not take up the offer of lifestyle interventions. Use contract monitoring meetings with providers to discuss, understand and agree actions to overcome problems such as lower than expected uptake of services, lack of service capacity or rejected referrals. Ensure that this information is shared with the healthcare professionals who are expected to make referrals and with the GP lead for cardiovascular disease prevention within the commissioning organisation.

• Discuss with providers the advantages and disadvantages of different referral systems, including opt-in, partial booking or set appointment times, and consider supplementing these with reminder systems, such as letters, text messages, recorded phone messages and/or personal phone calls, especially before the first appointment for a new intervention.

• Consider conducting local audits of referral practice and effectiveness, and share what is learnt with healthcare professionals making referrals.

• Consider developing one locally-agreed referral form for all healthcare professionals to refer to local providers offering support with behaviour change and lifestyle interventions.

• Ensure that providers offer additional appointments for people at increased risk of cardiovascular disease, so they can meet with a healthcare professional who can discuss their motivation to make behaviour and lifestyle changes.

• Specify that providers of lifestyle interventions feed the outcomes of the intervention back to the referring healthcare professional and their GP, and that this is recorded on the patient's record, so that further referrals or action can be considered if appropriate.

4.2.6 Reviewing and recording cardiovascular disease risk

Commissioners need to ensure that providers put systems in place for people to receive a periodic review of their cardiovascular disease risk. This may include people with a higher risk of cardiovascular disease but no clinical signs of cardiovascular disease and who are not being prescribed medication to manage their risk.
Commissioners should specify that reviews include evaluation of the outcomes of lifestyle and medical interventions, and include further tailored advice on reducing cardiovascular disease risk. Commissioners may wish to encourage their providers to develop a register for people with a high 5-year risk of cardiovascular disease. The National Service Framework for Coronary Heart Disease offers advice on developing a practice-based register of people at high risk of cardiovascular disease.

Primary care will be better able to offer preventive care to all people who have a high risk of cardiovascular disease if they use a register to record people with relevant risk factors. Commissioners should specify that all people who receive cardiovascular disease risk assessments, and are identified as having clinical risk factors, are entered onto general practice registers for:

- hypertension – QOF indicator BP1
- smoking – QOF indicator Smoking 3
- obesity – QOF indicator OB1
- diabetes mellitus – QOF indicator DM19
- chronic kidney disease – QOF indicator CKD1
- atrial fibrillation – QOF indicator AF1 (note that tests for atrial fibrillation are not routinely offered as part of the NHS Health Check, but additional tests for atrial fibrillation should be offered if a healthcare professional believes that a person may have an increased risk of stroke).

Commissioners should encourage GPs to share collated and anonymous register information between general practice, public health and commissioners. This information could be used to identify potentially unmet demand or need for services in a particular area, ensure equitable access, share good practice and monitor the impact of cardiovascular disease prevention programmes. This information could also be used to develop targeted health promotion campaigns.

4.2.7 Service models

Quality Improvement Productivity and Prevention
Commissioners may wish to work with their local Quality Improvement Productivity and Prevention (QIPP) lead to develop service models for identification and assessment. Examples are included in table 5.

**Table 5 Delivering QIPP through individual cardiovascular disease risk assessment**

<table>
<thead>
<tr>
<th>QIPP model</th>
<th>Example output</th>
</tr>
</thead>
</table>
| Evidence based cardiovascular disease screening and treatment | Mapping patients on cardiovascular disease risk registers against estimated prevalence for the area  
Finding 'missing' patients and assessing risks  
Undertaking preventive work to improve outcomes and quality |
| Implementing NICE hypertension guidelines      | Preventing cardiovascular events by improved identification and management of hypertension |

The NHS evidence QIPP collection examples have all been assessed against a set of criteria and then subject to an external peer review process. The best of these are highlighted on the [NHS Evidence](https://www.nhs.nhs.uk) website as 'highly recommended' examples.

**Commissioning for Quality and Innovation**

The Commissioning for Quality and Innovation (CQUIN) payment framework enables commissioners to reward excellence by linking a proportion of English healthcare providers' income to the achievement of local quality improvement goals. Commissioners should work with clinicians when using the [CQUIN payment framework](https://www.nhs.nhs.uk) as a lever for service change. The [NHS Institute for Innovation and Improvement](https://www.instituteforinnovation.org.uk) give examples.

**Incentivising implementation of cardiovascular disease risk assessments**

Commissioners may wish to consider using locally determined incentive schemes, including or similar to [Local Enhanced Services (LES)](https://www.nhs.nhs.uk) contracts, to improve uptake of cardiovascular disease risk assessments in primary care settings, including general practice and pharmacy. Commissioners should work with providers to negotiate contracts, and should consider the following options:
• Offering incentives to deliver agreed levels of face-to-face cardiovascular disease risk assessments.

• Offering incentives for high take-up rates among specified groups, for example people with mental health problems, physical or learning disabilities.

• Developing non-linear payment terms that make significantly greater levels of funding available for higher levels of uptake. Ensure payment schemes reward achievements in identifying and assessing harder-to-reach groups or locally defined target populations rather than being based solely on the total number of people being assessed for cardiovascular disease risk.

• Providing risk-related incentives for routine follow-up appointments, and incentives for successful referral and uptake of behaviour change and lifestyle interventions.

• Ensuring protocols are in place so that GPs receive information on people who are at high risk of cardiovascular disease and the interventions they have been offered and/or received, if the contact takes place in another setting. This is of particular importance when the risk assessment and/or interventions are not delivered by primary care, to ensure people are listed on appropriate registers and their treatment outcomes are monitored.

Commissioners may wish to consider how to challenge providers who have not completed all specified elements of a NHS Health Check cardiovascular disease risk assessment or who have not completed these assessments face-to-face. If data is missing, commissioners may wish to request that the person is called back for a cardiovascular disease risk assessment before payment is made.

Case studies

Commissioners may wish to refer to examples of service models for identification and assessment of cardiovascular disease risk, such as those in table 6.

Table 6 Examples of service models for identification and assessment

<table>
<thead>
<tr>
<th>Setting/Approach</th>
<th>Case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running the NHS Health Check Programme in a Community Pharmacy</td>
<td>NHS Islington commissions NHS Health Check in a pharmacy setting to complement a programme of NHS Health Check in primary care using outreach.</td>
</tr>
<tr>
<td>Delivering the NHS Health Check and Lifestyle Programmes - boosting uptake and minimising costs - experiences of NHS Stoke on Trent</td>
<td>NHS Stoke on Trent implements an NHS Health Check programme and lifestyle interventions, using a risk stratified approach.</td>
</tr>
</tbody>
</table>
## The BIG Bolton Health Check

NHS Bolton delivers an intensive cardiovascular disease risk assessment programme known as the 'Big Bolton Health Check'. Bolton use a 'logarithmic incentive scheme' to ensure annual reviews of those at high risk are undertaken and templates have been developed for practice systems to support this.

All patients at medium and high risk are referred to a health trainer, and to other behaviour change and lifestyle support services as appropriate.

Bolton has recently refined its cardiovascular disease risk assessment programme into the 'Triple Aim in Primary Care'. This involves working with practices on a number of initiatives to increase identification of people with a range of diseases and ensure they are recorded on disease registers, improve disease management (including for cardiovascular disease and diabetes) and support delivery of public health targets, including alcohol screening and identification.

Bolton has significantly increased recording on disease registers, has been able to track a reduction in referrals to secondary care and is seeing improvements in admissions for myocardial infarction and mortality.

## Making Every Contact Count: implementing NICE behaviour change guidance

The NICE shared learning database includes a case study from Rotherham's 'Prevention and lifestyle behaviour change: a competence framework' as part of the Yorkshire and Humber Making Every Contact Count strategy. This framework is an innovative whole-system response to enable a sustainable commissioner-led approach to promoting healthy lives. The framework is split into generic and specialist level competences and is being used by service and education commissioners; service providers, including human resources and organisational development; education providers and individual workers to bring together processes and systems to realise whole workforce change.

## West Midlands Every Contact Counts

Lifestyle health behaviour screening in the West Midlands
These examples are offered to share good practice; NICE makes no judgement on the compliance of these services with its guidance.

4.3 Behaviour change and lifestyle interventions

Commissioning behaviour change and lifestyle interventions for individuals at risk of cardiovascular disease will contribute to the overarching outcomes of:

- reducing under-75 mortality from cardiovascular disease (NHS outcomes framework improvement area 1.1)
- increasing healthy life expectancy (Public health outcomes framework outcome 1)
- reducing differences in life expectancy and healthy life expectancy between communities (Public health outcomes framework outcome 2)

by ensuring:

- people are helped to live healthy lifestyles, make healthy choices and reduce health inequalities (Public health outcomes framework domain 2)
- reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities (Public health outcomes framework domain 4)
- the need for care and support is delayed and reduced (Social care outcomes framework domain 2)
- a reduction in cardiovascular disease risk factors at an individual level.

This section:

- provides advice on commissioning behaviour change and lifestyle interventions
- considers four commonly used behaviour change and lifestyle interventions for people at risk of cardiovascular disease.

4.3.1 Commissioning behaviour change and lifestyle interventions

Behaviour change interventions are preventive strategies, delivered at an individual or community level, that promote positive health behaviours and choices in an appropriate setting[^4].
The assumption is that delivering health messages should encourage people to cease or adopt certain behaviours, which in turn is likely to result in health improvement. In the context of cardiovascular disease prevention, behaviour change services are often linked to modifiable cardiovascular disease risk factors that can be managed by changes to a person's lifestyle (see figure 1 in section 1).

Box 4 defines three commonly used evidence based methods for behaviour change interventions.

**Box 4 Methods of individual level behaviour change interventions**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief advice</td>
<td>Proactively raising awareness of, and assessing a person's willingness to engage in further discussion about, healthy lifestyle issues. It is usually given opportunistically, for example as part of a cardiovascular disease risk assessment or opportunistic contact.</td>
</tr>
<tr>
<td>Brief interventions</td>
<td>A structured way to deliver advice that constitutes a step beyond brief advice because more formal help is provided, such as arranging follow-up support. Brief interventions aim to equip people with tools to change attitudes and handle underlying problems.</td>
</tr>
<tr>
<td>Motivational interviewing</td>
<td>An interview that explores a person's motivation to change in order to assist them towards a state of action. The techniques used are adaptations of counselling skills and particular attention is paid to the listening skills of the interviewer.</td>
</tr>
</tbody>
</table>

The approaches are not mutually exclusive, brief interventions may contain brief advice and may use a motivational interviewing approach.

Commissioners may wish to refer to NICE public health guidance 6 on behaviour change at population, community and individual levels, which offers advice for commissioners on planning, delivering and evaluating behaviour change interventions and programmes.

As part of their commissioning strategy for cardiovascular disease prevention, commissioners should explore the local availability and provision of behaviour change and lifestyle interventions. Research suggests that nationally most of the elements required to achieve behaviour change...
are already established and the challenge for commissioners is to ensure they are effectively coordinated and targeted\(^3\). Commissioners should consider:

- **Evidence base** – all commissioned services should demonstrate that their methods are evidence-based, using NICE guidance if possible (see box 1 for relevant guidance). When developing service specifications, commissioners should clearly specify their requirements around the following factors, which research has shown are central to self-management and behavioural control\(^4\):
  - goal setting
  - monitoring behaviour
  - receiving feedback
  - reviewing goals in the light of feedback.

- **Innovation** – commissioners should ensure that tendering processes allow innovation in service provision to meet the needs of the local community. Commissioners may also wish to link with the QIPP programme.

- **Outcomes** – commissioners should consider performance managing or disinvesting in services that do not have an evidence base and/or have low uptake and poor outcomes. They may seek to expand access to services with a good evidence base and good outcomes, and that are popular with service users, although popularity should not be the sole indicator of service outcomes or quality.

- **Demand** – commissioners should seek service users’ views on preferred approaches to lifestyle and behaviour change interventions and seek evidence that providers collect this information. Once collected and collated, this information should be used to inform contract monitoring discussions and capacity planning decisions.
• **Capacity** – it is likely that implementing the NHS Health Check programme, and other systematic and opportunistic approaches to assess individual cardiovascular disease risk, may increase the number of people identified as likely to benefit from behaviour change and lifestyle interventions. Commissioners should have plans to meet the increased demand. NHS Diabetes and Kidney Care have produced a [Ready Reckoner tool](#) to assist capacity planning. Making Every Contact Count should improve the quality of referrals; commissioners should actively review referrals to and uptake of lifestyle interventions following assessment, and ensure pathways are in place to enable timely referral and uptake (see also section 4.2.5).

• **Uptake** – commissioners should review the uptake of local lifestyle interventions and ensure that referrals to these interventions are appropriate. Commissioners may wish to work with providers to produce clear eligibility guidance for service access. If uptake is lower than expected they should use service user feedback to consider possible reasons, including cultural appropriateness, time and location. Commissioners may wish to work with existing local community teams to improve access by offering services based in established community venues or provided by community groups that already successfully engage with the target cohort (see also section 4.2.5).

• **Awareness** – it is vital that people delivering the NHS Health Check and other stakeholders in cardiovascular disease prevention services are aware of, and know how to refer people to, relevant and appropriate behaviour change and lifestyle interventions. Commissioners should consider compiling a directory of local services and should use a variety of media (including but not limited to written and web-based media) and ensure these are available to, and used by, providers of the cardiovascular disease risk assessment.

• **Accessibility** – commissioners may also decide to specify the use of new media to maintain contact between healthcare providers and patients. They might wish to discuss with providers the possibility and merits of using text message appointment reminders or social media to offer advice, support and encouragement.

• **Information sharing** – commissioners should be clear about what aspects of individual information should be shared among providers and the most secure method for doing so. For example, nhs.net offers secure transfer of information between NHS organisations, but if referrals are being made into leisure services commissioners may need to agree a local process for ensuring this data is handled appropriately.
When commissioning lifestyle interventions, commissioners should be mindful of the national move towards personalisation and choice, and how this may influence decisions on whether to commission on a block contract or spot purchase using a unit cost price. The Department of Health has produced updates on what was learnt from the personalisation pilot sites, which may be useful to commissioners when deciding whether to implement personalised budgets locally.

Commissioners should ensure that people and/or their carers are provided with appropriate written materials that give further information on cardiovascular disease and the options for managing risk. Commissioners should ensure that such materials are evidence based and appropriate for the person's needs. Commissioners should check that alternative formats are available for people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English.

When specifying the service, commissioners should emphasise the importance of recruiting staff who can effectively engage and motivate people to change. This may include:

- specialist skilled healthcare professionals such as dieticians or physiotherapists
- competent and trained experts, such as dedicated smoking cessation workers or gym instructors
- staff with more generic skills to motivate behaviour and lifestyle change, such as:
  - health trainers – healthcare staff recruited for their communication skills and trained to deliver brief advice
  - health mentors – members of the local community recruited as peer mentors to help others to change their behaviour.

When commissioning a peer-led service, commissioners may find the NICE commissioning guide on peer support for women who breastfeed useful; this contains information on engaging communities and provides examples for recruiting peer supporters as well as training and supervision.

When specifying behaviour change and lifestyle services, commissioners should be clear about:

- the staff groups they intend to provide the service (for example, whether they would prefer to see services delivered by health mentors or health trainers)
4.3.2 Four commonly used behaviour change and lifestyle interventions

It is vital that everyone identified as having modifiable cardiovascular disease risk factors has access to appropriate lifestyle and behaviour change interventions.

Commissioners should note that NICE guidance recommends that lifestyle-related factors are considered and optimised before or alongside any drug treatment for the prevention of cardiovascular disease\(^{[48][49]}\). Commissioners should specify that lifestyle advice and the uptake of lifestyle and behaviour change services are periodically discussed during reviews of cardiovascular disease risk or preventive treatment (see also section 4.4\(^{[4]}\)).

This section outlines the commissioning considerations for four of the most commonly used behaviour change and lifestyle interventions:

- smoking cessation services
- dietary interventions
- physical activity
- alcohol services.

These behaviour change and lifestyle interventions can be commissioned as bespoke 'stand-alone' services or as part of a generic 'one-stop-shop' behaviour change and lifestyle service, such as those provided by health mentors or health trainers.

**Smoking cessation services**

Smoking is one of the biggest contributors to premature mortality from cardiovascular disease\(^{[50]}\), therefore the availability and effectiveness of smoking cessation services is integral to preventing cardiovascular disease.
In most areas smoking cessation services are well established and people who smoke should be proactively recruited into the service by primary care professionals, including GPs, practice and community nurses, pharmacists, dentists and other allied healthcare professionals. People who smoke should also be given brief advice opportunistically throughout the healthcare system[^1].

In line with NICE public health guidance 10 on smoking cessation, people with cardiovascular disease should be offered brief advice or, preferably, behavioural support from the local smoking cessation service. Where this is not happening, commissioners should seek to establish these referral routes and ensure there is sufficient capacity within the smoking cessation service to accommodate a potential increase in the number of referrals. Commissioners should note that smoking cessation services may include interventions provided by staff in a range of settings, including pharmacy and general practice.

Commissioners should ensure that they specify services in line with NICE guidance and that providers can clearly demonstrate how they have implemented NICE recommendations. NICE public health guidance 10 states:

- Set realistic performance targets for both the number of people using the service and the proportion who successfully quit smoking. These targets should reflect the demographics of the local population. Services should:
  - aim to treat at least 5% of the estimated local population of people who smoke or use tobacco in any form during the year
  - aim for a success rate of at least 35% at 4 weeks, validated by carbon monoxide monitoring. This figure should be based on those who start treatment, with success defined as not having smoked in the third and fourth week after the quit date. Success should be validated by CO monitor reading of less than 10 ppm at the 4-week point. This does not imply that treatment should stop at 4 weeks.

A local strategy to reach special target groups (low-income and pregnant smokers) should exist. NICE has produced a guide for commissioners on quitting smoking in pregnancy and following childbirth, which commissioners may refer to when setting up such a service.

**Dietary interventions**
Commissioners should consider extending dietary advice services to include people who are at increased risk of cardiovascular disease as a result of their diet, including people who are not clinically overweight or obese. Commissioners should specify that all staff delivering dietary advice should be confident about providing advice on areas of diet, such as salt intake, saturated fat and cholesterol, that are not solely aimed at reducing a person’s weight but can have a major impact on their chances of developing cardiovascular disease.

In line with NICE clinical guideline 43 on obesity, managers and healthcare professionals in all primary care settings should ensure that preventing and managing obesity is a priority at both strategic and delivery levels. Commissioners should ensure that healthcare professionals routinely discuss weight, diet and physical activity with people who are overweight or obese. When planning services and targeting resources commissioners should be aware that advice is more effective if given to people experiencing life events when weight gain is more likely, such as during and after pregnancy, the menopause and while stopping smoking.

People who are not responding to diet or physical activity services, and who are obese, should be referred to weight management services. Commissioners should ensure that relevant pathways and services are in place to enable this.

**Physical activity**

When designing and commissioning lifestyle and behaviour change interventions, commissioners should work with key local stakeholders (such as local authority leisure centres, local gyms and fitness providers) to ensure a range of physical activities are available that allow people to tailor their physical activity according to individual preferences and circumstances. Commissioners should ensure that people have access to a range of services that promote physical activity and operate at different times and on different days throughout the week.

Commissioners should refer to NICE public health guidance 2 on four commonly used methods to increase physical activity, which includes recommendations on:

- brief interventions in primary care
- exercise referral
- pedometers, walking and cycling schemes.
(Commissioners should endorse exercise referral schemes to promote physical activity only if they are part of a properly designed and controlled research study to determine effectiveness.)

Commissioners may wish to work closely with a range of public sector, voluntary and private providers to commission a variety of physical activity services. Examples might include free or subsidised membership to gyms, fitness classes, dance classes, swimming or weight loss programmes. Commissioners may also wish to consider opportunities to develop 'outdoor gyms' and gardening or allotment-based activities to make use of green space for exercise and health reasons.

**Alcohol services**

Commissioners of cardiovascular disease prevention services should ensure that referral pathways exist for people who are identified, during discussion about lifestyle and behaviour change, as having possible hazardous, harmful or dependent drinking behaviour. Commissioners should refer to the [guide for commissioners on alcohol services](#) for more information.

**Further resources**

Commissioners may find the following resources useful when commissioning behaviour change and lifestyle interventions for people at risk of cardiovascular disease:

- **London Health Observatory** [Local tobacco control profiles for England](#)
- **The National Centre for Smoking Cessation and Training** [commissioning information for smoking cessation services](#)
- **British Association of Cardiovascular Disease Prevention and Rehabilitation** [Standards and core components for cardiovascular disease prevention and rehabilitation 2012 (2nd edition)](#), which provides standards for health behaviour change and education, lifestyle risk factor management and psychosocial health
- **NHS Yorkshire and Humber** [Prevention and lifestyle behaviour change service: a competence framework](#), which may help commissioners to develop service specifications.
- **Leeds Metropolitan University** [Evaluation of health trainers](#); the university also provides information on the value for money offered by health trainers and a guide for commissioning them.
4.3.3 Service models

Commissioners may wish to consider commissioning lifestyle and behaviour change interventions in several different ways, and mixed models of provision may be appropriate across a local health economy.

Commissioners may wish to refer to examples of service models for lifestyle and behaviour change interventions, such as those in table 7.

Table 7 Examples of service models for lifestyle and behaviour change interventions

<table>
<thead>
<tr>
<th>Setting/Approach</th>
<th>Examples of service models or settings</th>
<th>Case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic lifestyle and behaviour change advice</td>
<td>Calderdale PCT</td>
<td>The Health Lifestyle Team offers a range of targeted interventions including: weight management, advice on physical activity, improving mental health and emotional wellbeing, smoking cessation and sensible drinking. There is also a programme that works with employers to motivate staff to look after their health. During 2010/11, Calderdale PCT invested £659,000 in services to cut alcohol, smoking and obesity. The savings in the first year are projected to be £292,000, rising to £877,000 within 3 years.</td>
</tr>
<tr>
<td>Generic lifestyle and behaviour change advice</td>
<td>Stoke-on-Trent Lifestyle Programme</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>NHS Stoke on Trent has commissioned a lifestyle programme that offers one-to-one support throughout a person's lifestyle change. The service is staffed by a permanent team of lifestyle coaches. By recruiting permanent team members and investing in their learning and development needs, staff turnover has been minimised and valuable experience retained. The service offers a range of interventions. For example, 12-week vouchers are available for Slimming World or Weight Watchers and there are free 20-week local activity programmes such as gym membership. In addition, the coaches refer to local mental health/emotional wellbeing services that work with people on self-esteem issues; this helps people feel sufficiently confident to make further lifestyle changes. A lifestyle network has also been developed in Stoke-on-Trent. This supports people after they have been discharged from the lifestyle intervention programme and helps them to maintain the changes they have made.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise on prescription scheme</th>
<th>Partnership scheme between South Gloucestershire Council, NHS South Gloucestershire and South Gloucestershire Leisure Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise on prescription is an intervention specific to the person, developed with community involvement, focusing on how to overcome barriers to participation. The physical activity prescribed is safe and applicable to the client's health status and is agreed with them on the basis of their desires and realistic expectations of participation in regular physical activity. There is also a weight management on referral programme in which people learn to eat healthier food in order to lose weight. The exercise on prescription team consists of professionals with appropriate competencies, who use a formal process of screening, monitoring, re-assessment and evaluation to provide a safe activity intervention. Community settings are used for physical activities.</td>
<td></td>
</tr>
<tr>
<td>Community based vascular prevention programme</td>
<td>Imperial College Healthcare NHS Trust and NHS Westminster MyAction Programme</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MyAction Westminster is an innovative family-centred vascular prevention programme aimed both at people with established cardiovascular disease and those identified in primary care as being at high multifactorial risk by NHS Health Check (more than 20%). People are referred from both secondary and primary care. The programme is delivered by a multidisciplinary team that includes cardiac specialist nurses, dieticians, physical activity specialists, a consultant cardiologist and a psychologist. It includes individualised assessments, educational workshops and supervised physical activity sessions. More than 1500 people have been referred so far and programme uptake and adherence is high. Half of those participating are from black and minority ethnic groups and come from some of the borough's most deprived wards. Audit of clinical outcomes has shown substantial improvements in lifestyle (smoking cessation, increased adherence to a cardioprotective diet, weight loss, increased in physical activity), cardiovascular risk factors (reduction in blood pressure, lipids) and patient-reported outcomes (reduced anxiety and depression, improved quality of life). The clinical outcomes are similar for all ethnic groups.</td>
<td></td>
</tr>
</tbody>
</table>

| Every Contact Counts | West Midlands | Routine and opportunistic collection of information on a range of lifestyle health behaviours including alcohol, smoking, diet, physical activity, mental health and wellbeing plus brief opportunistic advice |
### Encouraging healthy eating in disadvantaged communities

| A Mobile Food Store sells fruit and vegetables at cost price to targeted communities who eat less than 1 piece of fruit or vegetables per day. This commissioned service is delivered by Health Trainers who are also able to support behaviour change and signpost to healthy lifestyle services. This not for profit service is delivered through a unique partnership between the PCT, private provider and third sector organisation.
| A video is available.

### Health trainer service

| The health trainer service specifically identifies and works with people from deprived communities and hard to reach groups to support health and wellbeing lifestyle changes. In the Great Yarmouth and Waveney area, a health trainer is also aligned to every GP practice to provide lifestyle and behaviour change support. A recent evaluation found that this model worked best when practice staff had a good understanding of the role of the health trainer and the support they can provide. This understanding was key for enabling practice staff to successfully engage patients with the health trainer by clearly explaining how the service could help them and what they could expect.

These examples are offered to share good practice; NICE makes no judgement on the compliance of these services with its guidance.

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4.4 Medical interventions

Commissioning services to provide medical interventions for the prevention of cardiovascular disease will contribute to the overarching outcomes of:

- reducing under-75 mortality from cardiovascular disease (NHS outcomes framework improvement area 1.1)
- increasing healthy life expectancy (Public health outcomes framework outcome 1)
- reducing differences in life expectancy and healthy life expectancy between communities (Public health outcomes framework outcome 2)

by:

- reduced numbers of people are living with preventable ill health and dying prematurely, while reducing the gap between communities (Public health outcomes framework domain 4)
- delaying and reducing the need for care and support (Social care outcomes framework domain 2)
- improving identification of people who are at risk of cardiovascular disease
- reducing individual cardiovascular disease risk factors.

This section provides support to commissioners and medicines management teams to ensure that people who are identified as being at high risk of cardiovascular disease are offered medical interventions in accordance with NICE guidance.

Commissioners should satisfy themselves that primary care professionals are prescribing NICE recommended medical interventions for the management of cardiovascular disease risk factors. These will include:

- drugs to reduce cholesterol (lipid modification drugs including statins)
- interventions to reduce blood pressure including antihypertensive drugs
- drugs to prevent blood clots including anticoagulants and antiplatelet treatments.
Commissioners should note that **NICE clinical guideline 67** on lipid modification recommends that:

- Before offering lipid modification therapy for primary prevention, all other modifiable CVD risk factors should be considered and their management optimised if possible. Baseline blood tests and clinical assessment should be performed, and comorbidities and secondary causes of dyslipidaemia should be treated. (Recommendation 1.4.2)

Commissioners should ensure that GPs prescribing pharmacological interventions are aware of local lifestyle and behaviour change interventions, including how to refer people to these services (see sections 4.2.5 and 4.3).

Commissioners should ensure that people receiving drugs for the prevention of cardiovascular disease receive regular assessment and drug reviews. These should include discussing modifiable lifestyle risk factors.

To optimise compliance with NICE guidance, commissioners should:

- Encourage GPs to prescribe non-branded drugs if clinically appropriate. Examples may include using technology like 'script switch' to assist this. For lipid-modification drugs (statins), there is evidence that some GPs continue to prescribe more expensive branded statins when equally effective, non-branded statins would be appropriate, and that these practices tend to have lower performance levels for cholesterol management[^4].

- Consider the recommendations in the **NICE clinical guideline 76** on medicines adherence to reduce wastage from non-compliance with drug treatments. Commissioners should note between a third and a half of all medicines prescribed for long-term conditions are not taken as recommended, which can affect patient outcomes and is a loss to the healthcare system in terms of wasted medicines and increased demands on the system[^5].[^6].[^7].[^8].[^9].[^10].[^11].[^12].[^13].[^14].

- Systematically monitor prescribing rates and cost across general practice. Compare and share individual anonymous general practice performance data and performance data benchmarked against other practices, and work with practices to formulate a clear response to balance any off-trend prescribing. Nationally there is a 25% difference in the prescribing of pravastatin/simvastatin as a proportion of all lipid modification drugs prescribed among PCTs, and a six-fold variation in the cost of prescribing[^15].

**Further resources**
The British Association of Cardiovascular Disease Prevention and Rehabilitation Standards and core components for cardiovascular disease prevention and rehabilitation 2012 (2nd edition) provides standards for medical risk factor management and cardioprotective therapies.

The NICE guide for commissioners on anticoagulation therapy services is a resource to help healthcare professionals in England commission effective anticoagulation therapy services for patients, in particular those with atrial fibrillation.

NHS Improvement Guidance on risk assessment and stroke prevention for atrial fibrillation.


[55] Studies show that adherence to treatment with lipid modification drugs is lower for primary prevention than secondary prevention, and can be as low as 25% over 2 years. Compliance also falls the longer people are prescribed the drugs. Adherence to therapy is associated with better outcomes, such as a reduction in the incidence of cardiovascular disease; ceasing to take statins or taking less than the prescribed dose can reduce or remove any benefit or cause harm.

5 Service specification for services for the prevention of cardiovascular disease

Commissioners may wish to consider commissioning services in a number of different ways and mixed models of provision are likely to be appropriate. Commissioners may wish to take action to stimulate the local market if there are identified shortages of providers at any point in the pathway and should note that any qualified providers may include health, local authority or other statutory partners, or private or third sector organisations.

Table 8 includes considerations for commissioners when developing a contract specification for cardiovascular disease prevention services. Contract considerations will differ depending on whether the contract is for population-wide, community-based or individual approaches.

Table 8 Considerations for contract specification

<table>
<thead>
<tr>
<th>Heading</th>
<th>Section</th>
<th>To be described in service specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Policy context</td>
<td>National policy drivers (see section 7). Evidence base (for example, NICE guidance and quality standards and NHS evidence).</td>
</tr>
<tr>
<td></td>
<td>Local strategic context</td>
<td>Local commissioning drivers (for example, reducing health inequalities, QIPP, CQUIN). Invest to save. Results of joint strategic needs assessment (JSNA).</td>
</tr>
<tr>
<td></td>
<td>Aims and objectives of service</td>
<td>The expected outcomes of the services, including a reduction in under-75 mortality from cardiovascular disease and other non-communicable disease (see section 1.1).</td>
</tr>
<tr>
<td>Service scope</td>
<td>Define service user groups</td>
<td>Exclusion criteria</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>
| Demographic profile of the local population (age, gender, ethnicity, socioeconomic status).
Local recorded and expected prevalence of people with cardiovascular disease (stroke, TIA, peripheral arterial disease, myocardial infarction, angina and chronic heart failure).
Local recorded and expected prevalence of people with cardiovascular disease risk factors (smoking, poor diet, high blood cholesterol, hypertension, physical activity, overweight/obesity, diabetes, psychosocial stress and excess alcohol consumption).
Local recorded and expected prevalence of people younger than 75 with low, moderate and high risk of cardiovascular disease.
Estimated prevalence of comorbidities (for example, hypertension, stroke, heart failure, depression).
Evidence of inequalities in outcomes between specific groups.
Number of wholly attributable and partially attributable cardiovascular disease-related hospital admissions, bed days and readmissions.
Number of people currently being treated in community-based lifestyle and behaviour change services.
Number of people who see their GP and have a recorded incidence of cardiovascular disease, cardiovascular disease risk, smoking, obesity, hypertension, atrial fibrillation, chronic kidney disease or diabetes (via relevant QOF data).
Population groups that will be targeted. | Define exclusion criteria in accordance with NICE guidance, relevant policy such as local implementation of NHS Health Check, and other locally determined criteria. |
| Geographical population | Proportion of people living in urban and/or rural areas.  
| | Areas of higher-than-average need (for example, areas of deprivation, areas with a high population of older people, areas with a high South Asian, African or African-Caribbean population).  
| | Population coverage required or geographical boundaries. |

| Service description/care package | Mapping existing services and assets for the prevention of cardiovascular disease, including:  
| | population-wide and community-based initiatives designed to create healthier environments supporting the prevention and reduction of cardiovascular disease.  
| | NHS Health Check.  
| | Opportunities for opportunistic identification.  
| | Lifestyle and behaviour change interventions.  
| | Commissioning of core service components.  
| | Interface with other local services including those for drugs and alcohol, smoking cessation, diet and nutrition, physical activity, weight management, and existing services across all sectors for the management and secondary prevention of cardiovascular disease, diabetes and chronic kidney disease. |

| Service delivery | Location | Service location and accessibility requirements.  
| | Integration with other services for people at risk of cardiovascular disease.  
| | Home-based, locality-based and centrally based services.  
| | Opportunities for personalisation. |
### Days/hours

- Expected hours of operation, including days, evenings and weekends.
- Expected number of people for cardiovascular disease risk assessments, opportunistic identification and lifestyle and behaviour change services, taking into account potential increased flow through the system over defined periods.
- Depending on local demography, consider:
  - commissioning interpreting services in areas with a large black or minority ethnic population
  - flexible drop-in style services, which may appeal to younger people and people who work long hours.

### Referral processes

- Referral criteria and processes for people with low, medium and high risk of cardiovascular disease, and existing diabetes or chronic kidney disease.
- Management of 'unable to attends' and 'did not attends' for cardiovascular disease risk assessments or lifestyle and behaviour change interventions.

### Response times

- Needs-based and outcomes-based.
- Setting specific times, particularly for access to lifestyle and behaviour change interventions.

### Care pathways

- Agreed clinical protocols or guidelines to support decision making in the patient pathway.
- Pathways for people with complex needs and comorbidities.
- Care coordination, for example using health mentors and health trainers.

### Discharge processes

- Process for discharge from services for people at risk of cardiovascular disease, including ongoing monitoring and communication with other teams (particularly general practice).
| Staffing | Profile of existing health and social care workforce.  
         | Staffing levels to be funded: minimum band or levels of experience and competency and expected skill mix.  
         | Skill mix and competencies of staff for specific areas of care. |
|----------|--------------------------------------------------------------------------------------------------|
| Information sharing | Define information sharing, confidentiality and audit requirements, including IT support and infrastructure.  
                      | Raising awareness of services for people at risk of cardiovascular disease (do patients and health and social care professionals know how to access services?). |
| Patient and public involvement | Processes to understand patient experience of cardiovascular disease prevention services in order to develop and monitor services. See also [Patient experience online network](#).  
                               | Expectations of how patient opinion, preference and experience will be used to inform service delivery (for example, focus groups, representation on working groups, and surveys).  
                               | Monitoring of complaints and compliments and how they are used to inform service. |
| Quality assurance and clinical governance | **Quality indicators**  
                                           | NICE quality standards define high-quality care.  
                                           | QOF rewards GPs for how well they care for patients.  
                                           | Patient satisfaction surveys and access to treatment. |
| Performance monitoring | Local need and demand for cardiovascular disease prevention services, including smoking cessation, weight management, diet and nutrition, physical activity.  
                         | Impact of service on cardiovascular disease incidence and associated admissions to accident and emergency department, inpatient hospital care and length of stay in hospital.  
                         | Measurement of referrals, starters and completers for lifestyle and behaviour change interventions (to be determined locally using best evidence if national guidance not available). |
| **Equality** | Measures to ensure equality of access to services, taking into account the risks of unintentional discrimination against groups who are often under-represented, such as people who do not speak English as a first language. Consider equity of access for people living in residential and nursing homes, those who are housebound, and people in prisons. |
| **Staff training and competency** | Training and competencies on recruitment and for ongoing development. Processes for monitoring clinical practice and competency, including professional registration and clinical supervision arrangements. Skill mix and competencies required across the care pathway, including competencies in cardiovascular disease risk assessments, clinical tests, behaviour change, prescribing. See Skills for Health for examples. Staff development – appraisal and personal development plans, and mandatory training. |
| **Audit** | Specify expectations for audit, which may include assessment, intervention, prescribing practices and successful treatment outcomes. |
| **Staff and patient safety** | Procedures for risk assessment. Formal procedures for incident reporting and monitoring. Address any safeguarding concerns and promote the welfare of children and vulnerable adults. |
| **Activity plan** | Long-term impact of cardiovascular disease prevention programme on incidence and trends of cardiovascular disease in the population. Planned service development setting out any productivity improvements. |
Cost

<table>
<thead>
<tr>
<th>Cost</th>
<th>Value for money</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely cost of new or additional services.</td>
<td></td>
</tr>
<tr>
<td>Anticipated set-up costs.</td>
<td></td>
</tr>
<tr>
<td>How will pricing be set?</td>
<td></td>
</tr>
<tr>
<td>Potential for better value for money.</td>
<td></td>
</tr>
<tr>
<td>Are patients receiving most appropriate services for reducing cardiovascular disease risk?</td>
<td></td>
</tr>
<tr>
<td>Cost of facilities (for example, venue hire).</td>
<td></td>
</tr>
<tr>
<td>Cost of staff travel to services and patients' homes.</td>
<td></td>
</tr>
<tr>
<td>QIPP.</td>
<td></td>
</tr>
<tr>
<td>See the Commissioning and benchmarking tool for further information.</td>
<td></td>
</tr>
</tbody>
</table>
6 The commissioning and benchmarking tool

Use the commissioning and benchmarking tool for integrated commissioning for the prevention of cardiovascular disease to determine the level of services that might be needed locally and to calculate the cost of commissioning the services.

6.1 Identify indicative local service requirements

The data used to populate the commissioning and benchmarking tool includes:

- age of population
- prevalence of modifiable risk factors for cardiovascular disease
- risk exposure to modifiable risk factors
- age-related modifiable risks for people aged 40 and older.

The commissioning and benchmarking tool selects the population at risk of cardiovascular disease using the nine Interheart study modifiable risk factors and, through interventions, identifies the risk reduction. Note that the commissioning and benchmarking tool does not have risk reduction rates for psychosocial stress, regular physical activity and diet. However, improving physical activity and diet overlaps with interventions that tackle other risk factors such as obesity and high cholesterol.

The commissioning and benchmarking tool helps you to assess local service needs using the indicative benchmarks as a starting point. You can amend the benchmarks to better reflect your local circumstances. For example, if your population is older than average or has significantly higher or lower rates of modifiable risk factors for cardiovascular disease, you may need to provide services for relatively fewer or more people.

6.2 Review current commissioned activity

You may already commission cardiovascular disease prevention interventions for your population. The tool provides tables in recurrent costs worksheet that you can populate to help you calculate your total current commissioned activity and costs.
6.3 Identify future change in capacity needed

Using the indicative benchmarks provided, or your own local benchmarks, you can use the commissioning and benchmarking tool to compare the activity that you might need to commission against your current commissioned activity. This will help you to identify the future change in capacity needed. Depending on your assessment, your future provision may need to be increased or decreased.

6.4 Model future commissioning intentions and associated costs

You can use the commissioning and benchmarking tool to calculate the capacity and resources needed to move towards the benchmark levels, and to model the necessary changes over a period of 5 years.

Use the tool to calculate the level and cost of activity you intend to commission and to consider the settings in which services that contribute to cardiovascular disease prevention services may be provided. The tool is pre-populated with data on the potential recurrent and non-recurrent cost elements that may need to be considered in future service planning, which can be reviewed and amended to accurately reflect your local circumstances.

Commissioning decisions should consider both the clinical and economic viability of the service, and take into account the views of local people. Commissioning plans should also take into account the costs of monitoring the quality of the services commissioned.

6.5 Potential savings

You can use the commissioning and benchmarking tool to calculate the potential savings associated with a service that contributes to the prevention of cardiovascular disease. For simplicity, savings are based on an estimated average cost of a cardiovascular disease event. Other costs are difficult to quantify because they depend on a number of variables. For example preventing cardiovascular disease may also help to prevent other non-communicable disease such as diabetes, chronic kidney disease, chronic obstructive pulmonary disease, dementia and some cancers. It may also contribute to improvements in mental health and wellbeing.
Population benefits in the first 5 years

For this tool we have taken a 5-year time frame and assumed some savings within this period; however, significant savings are likely to be achieved beyond 5 years.

The commissioning and benchmarking tool uses target (at risk) population estimates to estimate the proportion of the population who may successfully respond to interventions. This includes an assumption on uptake and compliance with interventions as a result of implementing the guidance. An estimate of 3% uptake and compliance over 5 years has been assumed for all risk factors as a default value in the tool. This is consistent with the more prudent targets included in the modelling undertaken for primary care trusts by Whitfield in 2009[57]. Users can amend this figure to reflect local estimates.

6.6 Potential health outcomes

A proportion of people who have a cardiovascular disease event do not recover. If there are fewer events there will be fewer deaths. In addition, reduced risk levels could lead to a lower percentage of patients dying as a result of a cardiovascular disease event. Cardiovascular disease risk modelling carried out for one primary care trust[52] shows that if there is a 20% move each year over 5 years towards a reduction in cardiovascular disease risk factors of around 3–6%, the estimated number of premature deaths that could be avoided after 5 years is between 983 and 1476.

Crude estimates for life-years gained as a result of implementation are provided in the 'potential savings and outcomes' part of the tool. These use data from a US study[58] that identified that approximately 44% of the fall in the death rate from coronary heart disease was a result of changes in risk factors.

Implementing a comprehensive approach to tackling cardiovascular disease risk factors could have a significant impact on the gap in life expectancy.

Ford ES, Ajani A, Croft JB et al. (2007) Explaining the decrease in US deaths from coronary
7 Further information

Table 9 summarises national drivers relevant to commissioning services for the prevention of cardiovascular disease. Local service redesign may address only one or two of them.

Table 9 National policy and key drivers relevant to the prevention of cardiovascular disease

<table>
<thead>
<tr>
<th>Document</th>
<th>Author</th>
<th>Year</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality and outcomes framework (QOF)</td>
<td>NICE</td>
<td>2011</td>
<td>Rewards general practice for quality care and helps standardise improvements in the delivery of clinical care. Includes indicators for the primary prevention of cardiovascular disease, and a range of modifiable risk factors.</td>
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</tbody>
</table>

British Heart Foundation 2009
Outlines a strategic approach to cardiac and vascular conditions, with an emphasis on prevention of cardiovascular disease.

The handbook for vascular risk assessment, risk reduction and risk management

University of Leicester and UK National Screening Committee 2008
Handbook draws together best practice guidelines for assessing and managing a range of vascular risks.

Useful sources of information for commissioning may include:

- The standard NHS contracts for acute hospital, mental health, community and ambulance services
- NHS Evidence: provides free access to clinical and non-clinical information – local, regional, national and international. Includes a QIPP library with case studies and commissioning zone
- NHS Improvement for examples of good practice, service development and redesign
- The NICE shared learning database offers examples of how commissioners and service providers have used NICE guidance to create innovative and effective local implementation programmes for service improvements
- Implementation and audit support tools for NICE guidance
- Guidance on risk assessment and stroke prevention for atrial fibrillation (GRASP-AF) is a query and risk stratification tool that enables practices calculate a stroke risk score for each patient with a history of atrial fibrillation and ensure that they are on appropriate oral anticoagulant therapy. It is free to download from the PRIMIS+ Profile Centre.
Commissioners may wish to alert local overview and scrutiny committees to the following Centre for Public Scrutiny and NICE tools:

- **Ten questions to ask if you are scrutinising cardiovascular disease prevention through planning and procurement activities, and regional programmes**
- **Physical activity and the environment: checklist for health overview and scrutiny committees**

Sources of further information to help you in assessing local health needs and reducing health inequalities include:

- The Information Centre for Health and Social Care's [Health Survey for England](#) is a series of annual surveys designed to measure health and health related behaviours in adults and children.
- [NHS Evidence](#) is a service that enables access to authoritative clinical and non-clinical evidence and best practice through a web-based portal. It helps people from across the NHS, public health and social care sectors make better decisions.
- [NHS Information Centre Indicator Portal](#) gathers together a number of health and social care indicators.
- [NHS Atlas of Variation](#) 2011 covers 71 indicators and 15 Programme Budget categories, including the prescribing of statins.
- [NHS Comparators](#) provides comparator data for NHS commissioning and provider organisations to enable users to investigate aspects of local activity, costs and outcomes.
- The [Disease management information toolkit](#) is a good-practice tool for decision-makers, commissioners and deliverers of care for people with long-term conditions, which presents data on conditions that contribute to high numbers of emergency bed days. It models the effects of possible interventions that may be commissioned at a local level and helps users to consider the likely impact of commissioning options.
- [Disease prevalence models](#) produced by the Association of Public Health Observatories provide primary care trust-level prevalence estimates by topic.
8 Topic Advisory Group: cardiovascular disease prevention

A topic-specific advisory group was established to review and advise on the content of the guide for commissioners. This group met once, with additional interaction taking place via email.

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