NHS Health Check
Best practice guidance

February 2017
About Public Health England

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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## Contents

Chapter 1. Background  
1.0 Introduction  
1.1 The NHS Health Check programme  
1.2 Funding and working across the healthcare system  
1.3 Quality and Outcome Framework indicators  
1.4 Equality and health inequalities

Chapter 2. Legal requirements for local authorities  
2.0 Summary of statutory requirements  
2.1 Offering the NHS Health Check to those eligible  
2.2 The risk assessment  
2.3 Continuous improvement  
2.4 Information governance and data flow  
2.5 Collecting and reporting NHS Health Check data

Chapter 3. The risk assessment  
3.0 Introduction  
3.1 Cardiovascular risk assessment  
3.2 Diabetes risk assessment  
3.3 Near patient/point of care testing (POCT) and quality control  
3.4 Raising awareness of dementia

Chapter 4. Risk management: lifestyle interventions  
4.0 Introduction  
4.1 Local stop smoking services referral  
4.2 Weight management  
4.3 Physical activity interventions  
4.4 Alcohol use interventions

Chapter 5. Risk management: secondary prevention in primary care  
5.0 Introduction  
5.1 Managing those with high cardiovascular risk  
5.2 Cholesterol  
5.3 Assessment for hypertension  
5.4 Assessment for chronic kidney disease  
5.5 Identifying individuals with an irregular pulse  
5.6 Management of people found to have abnormal fasting blood sugar or HbA1c

Chapter 6. Communications, marketing and branding  
6.1 PHE communications  
6.2 Marketing and branding  
6.3 Patient information
<table>
<thead>
<tr>
<th>Chapter 7. Delivering a high quality service</th>
<th>47</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0 Raising delivery standards</td>
<td>47</td>
</tr>
<tr>
<td>7.1 Workforce competencies</td>
<td>47</td>
</tr>
<tr>
<td>7.2 Dementia training</td>
<td>48</td>
</tr>
<tr>
<td>7.3 Alcohol resources</td>
<td>48</td>
</tr>
<tr>
<td>Chapter 8. Programme governance</td>
<td>50</td>
</tr>
<tr>
<td>8.0 Introduction</td>
<td>50</td>
</tr>
<tr>
<td>8.1 Governance structure</td>
<td>50</td>
</tr>
<tr>
<td>8.2 Content review process</td>
<td>51</td>
</tr>
<tr>
<td>Chapter 9. Quarterly data return</td>
<td>52</td>
</tr>
<tr>
<td>9.0 Overview</td>
<td>52</td>
</tr>
<tr>
<td>9.1 Data return timetable</td>
<td>52</td>
</tr>
<tr>
<td>9.2 Before submitting the data</td>
<td>53</td>
</tr>
<tr>
<td>9.3 Submitting the data</td>
<td>55</td>
</tr>
<tr>
<td>9.4 After the data has been submitted</td>
<td>55</td>
</tr>
<tr>
<td>10. Calculating the eligible population</td>
<td>57</td>
</tr>
<tr>
<td>Annex A. QOF indicators 2016/17</td>
<td>59</td>
</tr>
<tr>
<td>Annex B. Submitting quarterly data</td>
<td>62</td>
</tr>
<tr>
<td>Annex C. Eligible individuals</td>
<td>64</td>
</tr>
<tr>
<td>Annex D. NHS Health Check guidance and resources</td>
<td>66</td>
</tr>
<tr>
<td>Annex E. Relevant guidance</td>
<td>67</td>
</tr>
</tbody>
</table>
Chapter 1. Background

This section provides an overview of, and background to, the NHS Health Check programme.

1.0 Introduction

The NHS Health Check programme is one of the largest public health programmes in the world, with nearly 5 million people in England receiving an NHS Health Check since 2013. Public Health England (PHE) recognises this as a great achievement, against the backdrop of overall reductions in the public health grant funding, and would like to thank local authority commissioners and providers for their continued support in delivering the programme.

The NHS Health Check programme aims to prevent heart disease, stroke, type 2 diabetes and kidney disease, and raise awareness of dementia both across the population and within high risk and vulnerable groups. In April 2013, the NHS Health Check became a statutory public health service in England. Local authorities are responsible for making provision to offer an NHS Health Check to eligible individuals aged 40-74 years once every five years as set out in regulations 4 and 5 of the Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013, S.I. 2013/351.

The NHS Health Check is made up of three key components: risk assessment, risk awareness and risk management. During the risk assessment standardised tests are used to measure key risk factors and establish the individual's risk of developing cardiovascular disease. The outcome of the assessment is then used to raise awareness of cardiovascular risk factors, as well as to inform a discussion on, and agreement of, the lifestyle and medical approaches best suited to managing the individual’s health risk.

The original Department of Health (DH) modelling showed the average annual cost of the programme as £332m each year at full roll out and the benefit as £3.7bn with a cost per quality adjusted life year (QALY) of around £3,000. This modelling also suggests that it is cost effective with potential savings to the NHS of around £57m per year after four years, rising to £176m per year after 15 years.

1 Defined as 75% of the total five year eligible population receiving an NHS Health Check once every five years.
Additionally, the modelling shows that the NHS Health Check could, on average, prevent 1,600 heart attacks and strokes, saving at least 650 lives each year. Furthermore, the programme could prevent over 4,000 people a year from developing diabetes and detect at least 20,000 cases of diabetes or kidney disease earlier, allowing individuals to be better managed and improve their quality of life.

Achieving these health outcomes is dependent on close working between local authorities and their partners across the healthcare system, including primary care. This will help ensure the existence of robust referral pathways so that any additional testing and clinical follow up is undertaken, for example, where someone is identified in the risk assessment as being at high risk of having or developing a vascular disease.

This update to the programme’s best practice guidance helps local commissioners and providers to understand the legal requirements underpinning the programme’s delivery. It identifies where there is scope for local flexibility and innovation in delivery. It also signposts to a wide range of tools and resources that will support the delivery of a high quality local NHS Health Check programme.

This guidance updates and replaces the previous NHS Health Check best practice guidance published in March 2016. Key changes from the previous edition are listed in Table 1.

Table 1. Key changes from the previous best practice guidance edition

<table>
<thead>
<tr>
<th>Change</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated advice on information governance and data flows</td>
<td>2.4</td>
</tr>
<tr>
<td>Updated advice on identifying and managing people with familial hypercholesterolaemia following an NHS Health Check</td>
<td>3.1</td>
</tr>
<tr>
<td>Changes to the diabetes filter</td>
<td>3.2</td>
</tr>
<tr>
<td>New information on referring people from an NHS Health Check on to the NHS Diabetes Prevention Programme and managing people with non-diabetic hyperglycemia</td>
<td>3.1 and 4.2</td>
</tr>
<tr>
<td>New information on NHS Health Checks and One You</td>
<td>6.5</td>
</tr>
<tr>
<td>The publication of new dementia training resources</td>
<td>7.2</td>
</tr>
<tr>
<td>The publication of new NHS Health Check Health guidance on doing Equity Audits</td>
<td>7.4</td>
</tr>
<tr>
<td>New behavioural insight top tips for increasing the uptake of NHS Health Checks</td>
<td>Annex D</td>
</tr>
</tbody>
</table>

1.1 The NHS Health Check programme

Reducing avoidable premature mortality is a government priority. Through early identification and management of risk factors and early detection of disease, the NHS Health Check will help achieve the ambitions set out in ‘From evidence into action: opportunities to protect and improve the nation’s health’, the ‘NHS Five Year Forward View’ and the ‘Cardiovascular disease outcome strategy’.

Cardiovascular disease (CVD) is one of the conditions most strongly associated with health inequalities, with death from CVD three times higher among people in the most deprived communities compared to those that in the most affluent. For men, 27.1% of the gap in life expectancy between the most and least deprived fifth of areas in England is due to excess deaths from circulatory diseases and, for females, this figure is 23.6%. Additionally, the cost of social and health care from the rise in levels of obesity, type 2 diabetes and dementia makes the prevention and risk reduction of these conditions key drivers of the programme.

The NHS Health Check programme offers a fantastic opportunity to help people to live longer, healthier lives. It aims to improve health and wellbeing of adults aged 40-74 years through the promotion of earlier awareness, assessment, and management of the major risk factors and conditions driving premature death, disability and health inequalities in England.

The programme will achieve this by:

- promoting and improving the early identification and management of the individual behavioural and physiological risk factors for vascular disease and the other conditions associated with these risk factors
- supporting individuals to effectively manage and reduce behavioural risks and associated conditions through information, behavioural and evidence based clinical interventions

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3 From evidence into action: opportunities to protect and improve the nation’s health. Public Health England. 23 October 2014.
7 The Segment Tool 2016 – Segmenting life expectancy gaps by cause of death
https://fingertips.phe.org.uk/profile/segment
• helping to reduce inequalities in the distribution and burden of behavioural risks, related conditions and multiple morbidities
• promoting and supporting appropriate operational research and evaluation to optimise programme delivery and impact, nationally and locally
Figure 1. NHS Health Check pathway
1.2 Funding and working across the healthcare system

On 1 April 2013, local authorities became responsible for the risk assessment and lifestyle interventions for the NHS Health Check programme, funded through the public health grant. The risk assessment element of the check is a statutory function that local authorities are required to commission or provide. Guidance on the ringfenced public health grant conditions and mandated functions in England can be found here.

Additional testing and clinical follow up, for example, where someone is identified as being at high risk of having or developing vascular disease, remains the responsibility of primary care and will be funded through NHS England. Local authorities will need to work closely with their partners across the healthcare system, including through health and wellbeing boards, to ensure these different elements of the programme link together.

As part of the financial accountability arrangements, local authorities will have to provide DH with a revenue outturn form detailing public health expenditure. This will include reporting expenditure against set public health categories including the NHS Health Check programme, more guidance can be found here.

1.3 Quality and Outcome Framework indicators

The Quality and Outcomes Framework (QOF) is a voluntary incentive scheme for GP practices in the UK. The QOF contains groups of indicators, against which practices score points according to their level of achievement, rewarding contractors for the provision of quality care.

The NHS Health Check aligns strongly with QOF, supporting the achievement of a number of assessment and clinical management indicators. These are summarised in Annex A.

1.4 Equality and health inequalities

One of the programme’s objectives is to reduce health inequalities. Local authorities may tailor the delivery of the programme in a number of ways to achieve this. Although local authorities have a duty to offer the NHS Health Check to all eligible people, PHE supports approaches that prioritise invitations to those with the greatest health risk.

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8 Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013, S.I. 2013/351.

could include, for example, prioritising invitations to people with an estimated ten-year CVD risk score greater than 10% or those living in the most deprived areas.

The programme has also been designed so that the majority of the check, including the tests and measurements required for the risk assessment, can be delivered in different settings. This will help ensure the programme is accessible to a wide range of people. A broad selection of case studies that demonstrate how local authorities have targeted groups with the greatest health need can be found on the NHS Health Check website.

In addition, local areas will wish to ensure that the NHS Health Check programme they offer is in keeping with the Equality Act 2010. To support this, PHE has published guidance on undertaking a Health Equity Audit on the NHS Health Check programme. A quick start guide\(^{10}\) is also available to help public sector organisations understand a key measure in the Equality Act, the public sector equality duty, which came into force in April 2011. Local areas will be familiar with the purpose and provisions of the Act and understand, for example, that reasonable adjustments need to be made for disabled people when providing services and exercising public functions.

This duty recognises that equality of opportunity cannot be achieved simply by treating everyone the same. Active consideration should be given locally with regard to both access to, and delivery of, the NHS Health Check for everyone but specifically in respect of those who share one of the nine protected characteristics. For example, the way that wheelchair users access their NHS Health Check, as well as how their risk assessment is undertaken and how they are supported to improve their lifestyle will require specific consideration and action.

Chapter 2. Legal requirements for local authorities

This section sets out the statutory duties of local authorities to deliver the NHS Health Check and return data to PHE.

2.0 Summary of statutory requirements

The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 S.I. 2013/351 set out a number of statutory public health functions for local authorities from 1 April 2013. These regulations have been made by the Secretary of State for Health under powers conferred by the National Health Service Act 2006\(^\text{11}\) and the Local Government and Public Involvement in Health Act 2007.\(^\text{12}\) This document provides guidance on what local authorities need to do to comply with the regulations and where there is flexibility. Legal duties exist in relation to offering NHS Health Checks (referred to as ‘health check’ in the regulations), the content of the risk assessment, communication of results, data recording, transfer and take-up rates. It is important that local authorities are satisfied that they are fulfilling their legal duties.

Legal duties exist for local authorities to make arrangements:

- for each eligible individual aged 40-74 to be offered an NHS Health Check once in every five years and for each individual to be recalled every five years if they remain eligible
- for the risk assessment to include specific tests and measurements
- to ensure the individual having their NHS Health Check is told their cardiovascular risk score, and other results are communicated to them
- for specific information and data to be recorded and, where the risk assessment is conducted outside the individual’s GP practice, for that information to be forwarded to the individual’s GP

\(^{11}\) Sections 6C (1) to (3), 186A (4) (b) and 272(7) and (8) of the National Health Service Act 2006.

\(^{12}\) Sections 225(1) to (3) and (7) (e), 229(2) and 240(10) of the Local Government and Public Involvement in Health Act 2007.
Local authorities are also required to continuously improve the percentage of eligible individuals having an NHS Health Check. Further information on these provisions is set out in this document.

Local authorities are not responsible for offering eligible prisoners or people in detained settings an NHS Health Check. Section 7A of the National Health Service Act 2006, as amended by the Health and Social Care Act 2012, requires NHS England to provide public health services in prisons and detained settings, this includes offering all detainees aged between 40 and 74 an NHS Health Check. PHE recommends that the NHS and local government work closely together to ensure that those people released from custody are able to access services in the community.

2.1 Offering the NHS Health Check to those eligible

Local authorities have a legal duty to make arrangements for everyone eligible aged 40 to 74 to be offered an NHS Health Check once in every five years and for them to be recalled for another check every five years after that, while they remain eligible.

As the NHS Health Check is a public health programme aimed at preventing disease, people with previously diagnosed vascular disease or who meet the criteria set out below are excluded from the programme. These individuals should already be receiving appropriate management and monitoring through existing care pathways.

Exclusion criteria:

- coronary heart disease
- chronic kidney disease (CKD) which has been classified as stage 3, 4 or 5 within the meaning of the National Institute for Health and Care Excellence (NICE) clinical guideline 182 on CKD
- diabetes
- hypertension
- atrial fibrillation
- transient ischaemic attack
- hypercholesterolemia
- heart failure
- peripheral arterial disease
- stroke
- prescribed statins
- people who have previously had an NHS Health Check, or any other check undertaken through the health service in England, and found to have a 20% or higher risk of developing cardiovascular disease over the next ten years
NOTE: Where someone has a CVD risk of 10-19%, they would not be excluded from recall unless they meet one of the other exclusion criteria, for example, being prescribed a statin.

Local authorities may choose to extend the NHS Health Check programme to cover a wider age range of people or to include additional tests or questions to the risk assessment. In doing so, the needs of the local population cost and benefits should be considered. Additional people who do not form part of the eligible population as stipulated in the regulations should be excluded from the quarterly data returns.

2.2 The risk assessment

Everyone receiving an NHS Health Check will have a risk assessment that will look at individual risk factors as well as their risk of having, or developing, vascular disease in the next ten years.

Tests and measures

Local authorities have a legal duty to ensure that the specific tests and measures listed below are completed during the risk assessment and that the results are recorded. Where the risk assessment is conducted outside the individual’s GP practice, there is also a legal duty for the following information to be forwarded to the individuals GP:

- age
- gender
- smoking status
- family history of coronary heart disease
- ethnicity
- body mass index (BMI)
- cholesterol level
- blood pressure
- physical activity level
- alcohol use disorders identification test (AUDIT) score
- cardiovascular risk score

In addition, those aged 65-74 should be made aware of the signs and symptoms of dementia and signposted to memory services if this is appropriate.

Local authorities can decide on the delivery setting for the risk assessment as long as the staff who carry them out are appropriately trained and qualified. For example, they may wish to use a combination of pharmacies and other community settings, as well as GP practices to help ensure the programme is as accessible to as many people as possible. The tests, measurements and risk calculations that make up the risk
assessment part of the NHS Health Check are stipulated in legislation to ensure a uniform, quality offer is delivered across England.

**Communication of results**
The individual having an NHS Health Check must be told their BMI, cholesterol level, blood pressure and AUDIT score as well as their cardiovascular risk score.

**A note on safety and quality**
Although local areas can determine where and who delivers the risk assessment, local authorities will wish to consider how the tests and measurements are standardised and quality assured.

This is not a legal requirement of the regulations but equally this is key to providing a high quality and safe service.

It is pivotal that the actions taken at certain thresholds are the same and in line with national guidelines, including those issued by NICE, so that people receive the necessary and appropriate care. Further information and guidance on providing a high quality and safe service can be found in the NHS Health Check programme standards.

**2.3 Continuous improvement**

As well as offering the NHS Health Check to 100% of eligible people over five years, local authorities have a legal duty to seek continuous improvement in people having an NHS Health Check.

PHE aspires to achieve a national take-up rate in the region of 75% of the eligible population having an NHS Health Check once every five years. Ensuring a high percentage of the eligible population have an NHS Health Check is key to optimising the clinical and cost effectiveness of the programme. This is especially important for populations with the greatest health needs and will impact on the programme’s and local area’s ability to narrow health inequalities.

Local authorities have the flexibility to decide how to secure continuous improvement and to use data published in the public health outcomes framework to help monitor activity. Some areas have adopted the use of social marketing, local champions,
delivering checks in non-NHS settings and out of hours, or have used a combination of these approaches to reach more of the eligible population. You can find further information in the marketing section of the NHS Health Check website.

2.4 Information governance and data flow

Data flow between parties involved in the NHS Health Check programme is subject to the Data Protection Act and information governance rules, more information is available on the Information Commissioner's Office website. The three main data flows for the programme are identifying and inviting the eligible population, transferring NHS Health Check assessment data from non-GP NHS Health Check providers back to the GP practice, and data extraction from GP practices for local monitoring, evaluation and quality assurance of NHS Health Check.

The actual process and requirements of securing data is subject to change, readers are therefore directed to the NHS Health Check website to review the Information Governance and Data Flows Pack (last updated October 2016). It is the responsibility of those storing or moving data to ensure that all systems required are in place and up to date.

The level of data required by the commissioner to properly assess the impact of the programme is set in the NHS Health Check minimum data set. The current template can be found on the NHS Health Check national website; this information can also be found on the NHS Digital national website.

2.5 Collecting and reporting NHS Health Check data

Local authorities must collect information on the number of NHS Health Checks offered and the number of NHS Health Checks received each quarter and return this data to PHE. This data collection requirement is set out in the single data list (ref 254-00), which prescribes the datasets that local government must routinely submit to central government.

PHE manages the NHS Health Check data return process and requires an individual from every local authority, nominated by the Director of Public Health, to submit data each quarter via the programme website. More information on recording, collecting and quality assuring data before submitting it to PHE can be found in Chapter 9 Quarterly data return or by contacting PHE.
Chapter 3. The risk assessment

3.0 Introduction

This section sets out the information that needs to be collected during the cardiovascular risk assessment part of the NHS Health Check, see Figure 2.

3.1 Cardiovascular risk assessment

During an NHS Health Check, QRISK® 2 should be used to calculate an individual's 10-year risk of developing cardiovascular disease.\(^\text{14}\) The following information explains what data is required for the QRISK® 2 risk engine, and the best practice for obtaining it.

**Age**

**Data required:** age recorded in years.

**Key points:** the age of the individual should be 40-74 years (inclusive).\(^\text{15}\)

**Gender**

**Data required:** the gender should be recorded as reported by the individual. If the individual discloses gender reassignment, they should be provided with CVD risk calculations based on both genders and advised to discuss with their GP which calculation is most appropriate for them as an individual.

**Ethnicity**

**Data required:** self-assigned ethnicity using one of the following categories: white/not recorded, Indian, Pakistani, Bangladeshi, other Asian, black African, black Caribbean, Chinese, other including mixed.

**Key points:** ethnicity is needed for the diabetes risk assessment. Ethnicity should be recorded using the Office for National Statistics 2001 census codes.

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Figure 2. Overview of the vascular risk assessment and management programme
Smoking status
Data required: non-smoker (never smoked), ex-smoker (previously smoked), light smoker (fewer than 10 a day), moderate smoker (11-19 a day), heavy smoker (≥ 20 a day).

Related stages of the check: local authorities may wish to ensure processes are in place so a smoker who wants to quit can be offered a referral to a local stop smoking service.

Family history of coronary heart disease
Data required: information on family history of coronary heart disease in first-degree relative under 60 years.

Key points: first-degree relative means father, mother, brother or sister.

Body mass index (BMI)
Data required: BMI is calculated from the weight divided by the height squared of the individual.

Key points: if the individual cannot have their height and/or weight measured, including amputees, the individual’s waist circumference, in supine position where possible, can be used to assess whether the person is overweight or obese, and their risk of developing diabetes. The thresholds for waist circumference are set out in the NICE obesity clinical guidelines. The QRISK® 2 calculation will default to population averages where information is not added, so it will estimate BMI based on the age and gender entered into it.

Related stages of the check: BMI is required for the CVD risk calculation. It may also used by the diabetes validated risk assessment tools and diabetes filter to identify individuals at risk of type 2 diabetes.

Additional guidance
- Body mass index thresholds for intervening to prevent ill health among black, Asian and other minority ethnic groups. NICE advice LGB13. January 2014

Cholesterol test
Data required: cholesterol must be measured as the ratio of total serum cholesterol to high density lipoprotein cholesterol.

Key points: a random cholesterol test should be used for this assessment. A fasting sample is not required.
Related stages of the check: cholesterol is a major modifiable risk factor of vascular disease, and can be reduced by dietary change and physical activity, but medicines may also be required depending on the degree of elevated risk.

Additional guidance
o Familial hypercholesterolaemia: identification and management. NICE clinical guideline 71. August 2008

Systolic and diastolic blood pressure
Data required: both systolic (SBP) and diastolic blood pressure (DBP).

Key points: pulse rhythm should be taken prior to a blood pressure check, in line with NICE Hypertension clinical guideline. Individuals who are found to have an irregular pulse rhythm should be referred to the GP for further investigation of atrial fibrillation.

Related stages of the check: if the individual has a blood pressure at, or above, 140/90mmHg, or where the SBP or DBP exceeds 140mmHg or 90mmHg, respectively, the individual requires:
• a non-fasting HbA1c test or a fasting plasma glucose (FPG) (see section on diabetes risk assessment). This is part of the diabetes risk assessment element of the NHS Health Check and local authorities will need to consider its provision
• an assessment for hypertension. This will take place in primary care and will require local authorities to work closely with their partners to ensure people receive appropriate clinical follow up
• an assessment for CKD (see the section on additional testing and clinical follow up). Again this will take place within a GP setting and links across the system are essential

Additional guidance
o Hypertension in adults: diagnosis and management. NICE clinical guideline 127. Updated August 2016

Physical activity assessment
Data required: Level of physical activity as categorised using the General Practitioner Physical Activity Questionnaire (GPPAQ).

Key points: GPPAQ provides a measure of an individual’s physical activity levels, which have been shown to correlate with cardiovascular risk. It is also recommended for use as part of Let’s Get Moving (LGM): a physical activity care pathway.
Related stages of the check: a brief intervention on physical activity can help support people to become and remain active and will be appropriate for the majority of people who fall into all GPPAQ classifications other than active. Individuals who are identified as inactive could be considered for exercise referral where local services exist. Further guidance is included at section 4.

Additional guidance
- Physical Activity: Brief advice for adults in primary care. NICE public health guideline 44. 2013

Alcohol risk assessment

Data required: Fast alcohol screening test (FAST) or alcohol use disorder identification test (AUDIT) score.

If the individual achieves a ‘positive result’, which is a score of five or more using the first three questions of AUDIT-C or three or more on FAST, the second phase should be undertaken, see Figure 3.

The second phase involves completing the remaining questions of the full AUDIT. It is this full AUDIT score that can identify the risk level of the individual.

If the total AUDIT score from the full ten questions is eight or more, this indicates the individual’s consumption of alcohol might be placing their health at increasing or higher risk of harm.

Key points: to identify the risk of harm from alcohol, the World Health Organization (WHO) recommends that the AUDIT questionnaire should be used. This questionnaire is validated, has been used all over the world and is considered to be the ‘gold standard’ alcohol risk questionnaire. Both FAST and AUDIT can be self-completed by the individual or the questions can be verbally asked of the individual and their response recorded.

New UK alcohol guidelines that were published in January 2016, recommend a lower threshold of alcohol units for men. The guideline now states that both men and women should not regularly exceed 14 units per week to keep their risk of alcohol-related harm low. As a result, PHE reviewed the recommended screening tools (AUDIT-C, FASE and full AUDIT) and concluded that no changes are needed to these tools.
Related stages of the check: if the individual meets or exceeds the AUDIT threshold of eight, the individual should be given brief alcohol advice to reduce their health risk and to help reduce alcohol-related harm. A referral to alcohol services should be considered for those individuals scoring 20 or more on AUDIT. Further guidance on this is provided in section 4.

Additional guidance
- Alcohol-use disorders: prevention. NICE public health guideline 24. June 2010

3.2 Diabetes risk assessment

Individuals who are identified as being at high risk of type 2 diabetes should also receive a plasma glucose test – either an HbA1c, which is recommended, or a fasting
plasma glucose test as part of an NHS Health Check. Making arrangements for the plasma glucose test is a local authority responsibility.

There are a number of ways of determining who is at high risk of diabetes and who has undiagnosed diabetes, and the results obtained will vary by the method or test used. The NHS Health Check Expert Scientific Advisory Panel (ESCAP) has considered the evidence for the approach that should be used to identify people at high risk of diabetes. In 2016, ESCAP recommended that a validated diabetes risk tool should be used and specific thresholds applied to identify people at high risk of diabetes and so eligible for a blood glucose test. Data shows that the validated tools are more effective at identifying people who, following the blood glucose test, are identified with type 2 diabetes or non-diabetic hyperglycaemia (NDH). Where it is not possible for an area to introduce a validated risk tool then the historical diabetes filter can be applied. Local comparisons of detection rates across the tools can be made using the PHE high risk calculator.

**Data required:** The data required varies depending on the tool used but can include - age, gender, ethnicity, family history of diabetes, BMI, diagnosis of hypertension, waist circumference, smoking status, history of CVD, taking regular steroid tablets.

Individuals should be considered as being at high risk of diabetes using the following thresholds for the corresponding validated risk assessment tools:

- QDiabetes score is greater than 5.6
- Cambridge diabetes risk score is greater than 0.2
- Leicester practice risk score is greater than 4.8
- Leicester risk assessment score is greater than or equal to 16

If you are unable to introduce the use of a validated tool then the diabetes filter can still be used. In this case, people at high risk of diabetes, and so eligible for a blood glucose test, include:

- an individual from black, Asian and other ethnic groups with BMI greater than or equal to 27.5
- or
- an individual with BMI greater than or equal to 30
- or
- those with blood pressure at or above 140/90mmHg, or where the SBP or DBP exceeds 140mmHG or 90mmHg, respectively

In addition to individuals meeting the high-risk filter criteria, it is important to consider the situation of the individual, because some people who do not fall into the filter categories will still be at significant risk. This includes:

- people with first-degree relatives with type 2 diabetes or heart disease
• people with tissue damage known to be associated with diabetes, such as retinopathy, kidney disease or neuropathy
• women with past gestational diabetes
• those with conditions or illnesses known to be associated with diabetes (eg polycystic ovarian syndrome or severe mental health disorders)
• those on current medication known to be associated with diabetes (eg oral corticosteroids)

**Key points:** as with the other tests in the check, it is important that those people who do not go on for further testing understand that everyone has some level of risk. They should also be made aware of the risk factors for diabetes as part of the general lifestyle advice that should be offered to everyone having a check regardless of their risk.

**Related stages of the check**
The outcome of the test will establish how best the individual can be managed. Figure 4 provides a diagrammatic overview of the relevant pathways.

**Additional guidance**
- Type 2 diabetes: prevention in people at high risk. NICE public health guideline 38. July 2012
Figure 4. Diabetes risk pathways

Checking for diabetes risk

People identified at high risk of type 2 diabetes using a validated risk assessment tool or the diabetes filter

- HbA1c test
  - Yes
    - ≥48 mmol/mol (6.5%) (no symptoms)
    - 42 mmol/mol to 47 mmol/mol (6.0% to 6.4%)
  - No
    - Fasting plasma glucose test
      - ≥7 mmol/l (no symptoms)
      - <7 mmol/l
        - 5.5-6.9 mmol/l
        - <5.5 mmol/l
          - Healthy lifestyle advice
          - Diabetes diagnosis
      - ≥7 mmol/l (symptoms)
      - ≥7 mmol/l
        - Non-diabetic hyperglycaemia: intensive lifestyle advice / NHS Diabetes Prevention Programme
    - <42 mmol/mol (6.0%)
      - Healthy lifestyle advice
      - Diabetes diagnosis

≥48 mmol/mol (6.5%) (symptoms)
≥48 mmol/mol (6.5%)
Non-diabetic hyperglycaemia: intensive lifestyle advice / NHS Diabetes Prevention Programme
Diabetes diagnosis
Healthy lifestyle advice
Diabetes diagnosis
Non-diabetic hyperglycaemia: intensive lifestyle advice / NHS Diabetes Prevention Programme
Healthy lifestyle advice
Blood glucose testing
There is no single universally recognised blood test for high risk of diabetes or for diabetes itself. Random (non-fasting) plasma glucose tests are so influenced by food they are not recommended. Fasting plasma glucose tests, while less convenient, are a better method. An HbA1c test can also be used. These two main approaches for testing plasma glucose – fasting plasma glucose and HbA1c – are set out in the following sections.

HbA1c (glycated haemoglobin)
**Key points:** HbA1c testing does not require fasting so can be more convenient and reliable. Blood can be taken venously. HbA1c is formed when glucose binds to haemoglobin in red blood cells. The higher the plasma glucose over the past two or three months, the higher the HbA1c. Even within the non-diabetic range, HbA1c has been shown to be a risk marker for vascular events and can be used to assess the risk of diabetes.

In 2011, the WHO accepted HbA1c as an alternative method in the diagnosis of diabetes provided:
- stringent quality assurance methods are in place
- measurements are standardised
- no conditions exist which contraindicate an accurate HbA1c measurement such as haemolytic anaemia, iron-deficiency anaemia and some variant haemoglobins. HbA1c is not recommended for the diagnosis of diabetes in pregnancy when an oral glucose test is still required. HbA1c reflects glycaemia over the preceding 2-3 months so may not be raised if plasma glucose levels have risen rapidly
- situations where plasma glucose levels have risen rapidly require urgent/same day assessment by a GP, diabetologist or other qualified clinician. Examples include:
  - all symptomatic children and young people
  - symptoms suggesting type 1 diabetes (any age)
  - short duration diabetes symptoms
  - patients at high risk of diabetes who are acutely ill
  - patients taking medication that may cause rapid glucose rise, eg corticosteroids, anti-psychotics
  - acute pancreatic damage/pancreatic surgery

The WHO did not provide specific guidance on HbA1c criteria for people at increased risk of type 2 diabetes. However, a UK expert group on the implementation of the WHO guidance recommends using HbA1c values between 42 and 47mmol/mol (6.0-6.4%) to indicate that the individual is at high risk of type 2 diabetes. NICE public health guidance 38: Preventing type 2 diabetes: risk identification and interventions for individuals at high risk, supports this recommendation. This advice should be used in conjunction with the programme standards.
Fasting plasma glucose (FPG)

Key points: a FPG test can be used to identify those with potential diabetes or at high risk. It is also used in the presence of conditions that render the HbA1c test inaccurate (see above). To undertake an FPG test, the individual being tested should be informed of the fasting requirement in writing or over the phone and if possible the appointment should be scheduled for no later than 11am to make fasting easier.

Additional guidance

- Consensus statement: Use of haemoglobin A1c (HbA1c) in the diagnosis of diabetes mellitus. The implementation of WHO guidance 2011, Practical Diabetes, 2011, 1, 12a
- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guidance 38. July 2012

3.3 Near patient/point of care testing (POCT) and quality control

This section provides guidance and advice on the use of point of care testing (POCT) or near patient testing (NPT) for blood tests required as part of the NHS Health Check. It provides advice on training and quality assurance to support the safe use of POCT.

Fasting blood glucose or HbA1c POCT may be suitable for initially filtering out those who are unlikely to have diabetes or non-diabetic hyperglycaemia. However, diagnosis of diabetes or of non-diabetic hyperglycaemia requires a venous blood sample to be tested in the laboratory.

Where the introduction of POCT is being considered the Medicines and Healthcare Products Regulation Agency advises that:

- the local hospital pathology laboratory is involved as it can play a supportive role in providing advice on a range of issues including the purchase of devices, training, interpretation of results, troubleshooting, quality control, and health and safety. They will also be far more likely to support you if there are any challenges if they have been involved from the outset
- a POCT co-ordinator is identified to manage the creation, implementation and management of a POCT service and governance structure
- potential hazards associated with the handling and disposal of bodily fluids, sharps and waste reagents outside of a laboratory setting should be considered
- staff who use POCT devices must be trained. Only staff whose training and competence has been established and recorded should be permitted to carry out POCT
- the equipment instructions should always be read and staff should be particularly aware of situations when the device should not be used
- standard operating procedures (SOPs) which must include the manufacturer’s instructions for use, are developed. You should pay particular attention to any storage and handling requirements of the machine and cassettes
- quality assurance must be addressed, implementing quality control (QC) procedures provides assurance that the system is working correctly. A QC record should be in place for each machine
- which staff review the results should be considered, staff should be appropriately qualified and cited on the patient’s history
- record keeping is essential and must include patient results, test strip lot number and operator identity
- maintaining devices according to the manufacturer’s guidance is essential to ensure that they continue to perform accurately

Where POCT is used, the Care Quality Commission’s (CQC) diagnostic and screening procedure confirms that non-ambulatory blood pressure monitoring and blood tests carried out by means of a pin prick test are excluded from the CQC registration requirement. However, provider organisations are legally required to satisfy themselves as to whether CQC registration is required for any other service they provide.

Where it is agreed that POCT will be undertaken then local arrangements should seek to meet the relevant NHS Health Check programme standards. Additionally, ISO standard ISO15197:2013 defines performance standards for self-testing meters. In the absence of a standard for other point of care testing devices, this should be considered a minimum performance requirement.

Additional guidance
- Pathology quality assurance review; NHS England, 2014
- Management and Use of IVD Point of Care Test Devices. Medicines and Healthcare Products Regulatory Authority. December 2013. The report provides extensive guidance, including advice on clinical governance issues relating to the setting up and management of POCT, pathology and laboratory involvement, staff training, health and safety, standard operating procedures and quality issues
3.4 Raising awareness of dementia

The dementia component of the NHS Health Check does not require any formal assessment or memory testing. The purpose of the intervention is to raise awareness of:

- how people can reduce their risk of getting dementia and slow its progression
- the availability of memory services that offer further advice and assistance to people who may be experiencing signs and symptoms of dementia

Everyone who has an NHS Health Check should be made aware that the risk factors for cardiovascular disease are the same as those for dementia. What is good for the heart is good for the brain. Up to 30% of dementia is preventable through modifiable risk factors, including physical activity, healthy diet, reduced alcohol intake and not smoking.

In addition, everyone aged 65-74 who has an NHS Health Check should be made aware of the signs and symptoms of dementia and be signposted to memory services if this is appropriate. A leaflet for individuals having their check and training materials for those carrying out the check have been produced to support this. These resources are available to order or to download from our website in a variety of formats and languages.
Chapter 4. Risk management: lifestyle interventions

4.0 Introduction

The NHS Health Check is a preventative programme that is intended to help people live longer, healthy lives. Although the risk management element of the programme is not a legal responsibility for local authorities, it is essential if the programme is to benefit the public's health.

To maximise these benefits, everyone who has an NHS Health Check, regardless of their risk score, should be given clinically appropriate lifestyle advice, to help them manage and reduce their risk. So, unless it is deemed clinically unsafe to do so, everyone having the check should be provided with individually tailored advice that will help motivate them and support the necessary lifestyle changes to help them manage their risk. This approach echoes the competencies set out in Making Every Contact Count (MECC). MECC enables the opportunistic delivery of consistent and concise healthy lifestyle information to individuals at scale.

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 an individual's lifestyle. Individual-level behaviour change interventions can be delivered through different methods, including:

- brief advice,
- brief interventions
- motivational interviewing

The approaches are not mutually exclusive, brief interventions may contain brief advice and may use a motivational interviewing approach.¹⁶

Depending on the delivery model in place, this advice and the completion of the risk assessment may be completed by different professionals. So it is important that information such as smoking status, blood pressure, levels of physical activity and

¹⁶ as defined by NICE commissioning guideline 4.2 on Services for the prevention of cardiovascular disease
history of vascular disease in the family is transferred in written form between individuals and within the delivery team as necessary. This will help ensure continuity of care and a positive experience for the individual having the check.

4.1 Local stop smoking services referral

Key points: as with other lifestyle interventions which form part of the NHS Health Check, the provision of stop smoking services is funded through the local authority public health budget. Although offering these services as part of the programme is not mandated, they provide an essential contribution to its ultimate objective, by helping people to stop smoking and so manage or reduce their risk of developing future disease. Local authorities may therefore like to consider how anyone who smokes, and who wants to stop, is offered the support of a local stop smoking service.

NICE Public Health Intervention Guidance no. 1 ‘Brief interventions and referral for smoking cessation in primary care and other settings’ makes a number of practical recommendations on who should receive advice, as well as on who should advise smokers and how.

The National Centre for Smoking Cessation and Training (NCSCT) local stop smoking service and delivery guidance 2014, illustrates the importance of using every opportunity to systematically identify people who smoke and deliver very brief advice (VBA) and follow up, where appropriate, with a referral into effective support. This very brief advice consists of three steps:

- **ASK** – establish and record smoking status
- **ADVISE** – advise that the best way to stop is with a combination of pharmacotherapy and support
- **ACT** – offer a referral to a specialist service

A free training module on the delivery of VBA is available on the NCSCT website.

Additional guidance

- NCSCT local stop smoking services: service and delivery guidance. NCSCT. 2014. September 2014

4.2 Weight management

Preventing and managing obesity is complex. Where an individual’s weight status and/or their waist circumference is a key risk factor, advice or onward referral should be provided in line with the NICE clinical guidelines CG43 on the prevention, identification, assessment and management of overweight and obesity in adults and children. Where
the individual’s weight status is not a risk factor, it is still an opportunity to reinforce the benefits of healthy eating and being physically active.

When discussing weight management or referring individuals on to services, it will be important to take a personalised approach. This includes considering an individual’s characteristics (age, ethnicity, gender, lifestyle) as well as:

- willingness and motivation to change
- particular barriers to lifestyle change (for example, lack of time or knowledge)
- self-esteem
- current levels of fitness
- the views of family and community members

Local areas may have their own care pathway and services for overweight and obesity in adults, involving different tiers of services, in line with NICE guidance.

In addition, the individual’s alcohol intake could be considered as part of any discussion about energy intake, and the opportunity used to highlight links between alcohol intake and obesity with liver disease.

If the individual’s fasting plasma glucose (5.5 – 6.9 mmol/l) or HbA1c (42 – 47 mmol/mol or 6% – 6.4%) is above the threshold for non-diabetic hyperglycaemia but below the threshold for diabetes, there is very robust evidence that intensive lifestyle interventions in these individuals substantially reduces the risk of developing diabetes.

As it rolls out, the new Healthier You: NHS Diabetes Prevention Programme will offer an intensive intervention that supports people to lose weight, to increase physical activity and to eat more healthily. The long-term intervention allows individuals to set and achieve goals and make positive changes to their lifestyle. More information on the NHS Diabetes Prevention Programme can be found here. Where the programme is already available individuals should be referred to it in line with the local care pathway.

Additional guidance
- Non-alcoholic fatty liver disease: assessment and management. NICE guideline NG49. July 2016
- Preventing excess weight gain. NICE guideline NG7. March 2015
- Overweight and obese adults – lifestyle weight management. NICE guideline PH53. May 2014
- BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups. NICE guideline PH46. July 2013
- Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children. NICE guideline CG43. December 2006
4.3 Physical activity interventions

The UK Chief Medical Officers recommend that all adults should aim to be active daily. Activity should add up to at least 150 minutes of moderate intensity activity in bouts of ten minutes or more over a week. One way to approach this is to do 30 minutes at least five days a week. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensive activity spread across the week, or a combination of moderate and vigorous intensity activity. Adults should also do muscle strengthening exercises on two days each week. It should be emphasised that all adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

![Physical activity benefits for adults and older adults](image-url)

**What should you do?**

- **Be Active**
  - **VIGOROUS**: Run, Sport
  - **MODERATE**: Walk, Cycle

- **Sit Less**
  - **TV**: Turn off
  - **COMPUTER**: Turn off

- **Build Strength**
  - **GYM**: Use
  - **YOGA**: Practice

- **Improve Balance**
  - **DANCE**: Dance
  - **TAI CHI**: Practice

**Minutes per Week**

- **75 OR 150**
  - **VIGOROUS INTENSITY**: Breathing fast (difficulty talking)
  - **MODERATE INTENSITY**: Increased breathing (able to talk)

- **OR A COMBINATION OF BOTH**

**Break up sitting time**

- **2 DAYS PER WEEK**

Something is better than nothing.
Start small and build up gradually:
just 10 minutes at a time provides benefit.
MAKE A START TODAY: it’s never too late!

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Key points: If patients are not achieving recommended physical activity levels, practitioners should:

- offer to provide information on the recommended physical activity levels
- discuss, taking into account the individual’s circumstance, preferences and health status, what the individual might do to become more active and agree goals
- provide written information about the various types of activities and the local opportunities to be active
- for those who are sedentary or inactive with a health condition or risk factors, refer them to an exercise referral programme
- follow up at appropriate intervals over a three to six-month period

Additional guidance

- Physical activity benefits for adults and older adults. Department of Health, October 2015
- Exercise referral schemes to promote physical activity. NICE public health guidance 54. PH54 September 2014
- Physical activity: brief advice for adults in primary care. NICE public health guidance 44. May 2013. The recommendations supersede recommendations 1-4 in four commonly used methods to increase physical activity, NICE Public Health Guidance 2
- Start Active, Stay Active. A report on physical activity for health from the four home countries’ Chief Medical Officers. Department of Health. July 2011
- Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling. NICE Public Health Intervention Guidance 2. March 2006
4.4 Alcohol use interventions

The UK Chief Medical Officer recommends that men and women should not drink regularly more than 14 units a week to keep their risk of harm from alcohol low. If an individual is consuming up to 14 units a week, it is best to spread this over three days or more, but also have drink free days.

**Key points**: local authorities may wish to consider how individuals identified as drinking alcohol above low-risk levels (an AUDIT score of eight or above) can be offered advice to reduce their alcohol use.

Advice to reduce alcohol use is an essential part of helping people manage the risk alcohol poses to their health and the risk of developing disease in the future. Evidence suggests this advice is most effective when delivered immediately or as soon as possible after the AUDIT assessment – the ‘teachable moment’. This advice just takes a couple of minutes and consists of:

- **understanding alcohol units** – ensuring the individual understands how much they are drinking
- **understanding risk levels** – explaining the lower-risk guidance and how the health risk rises above this level
- **informing them of their level of risk** – informing the individual of their AUDIT score (a mandatory requirement), what risk level this indicates and where their risk level compares to the rest of the population
- **benefits of cutting down** – explain some of the benefits that could come from reducing their alcohol consumption.
- **tips for cutting down** – providing the individual with a menu of things they could try to cut back on their alcohol consumption

This brief advice could be supported by an information leaflet or booklet given to the individual to reinforce the brief advice given and for future use.

Providing information and brief advice on lower-risk drinking is also recommended as part of the guidance on lifestyle interventions within the NICE clinical guideline on hypertension and NICE public health guidance on preventing harmful drinking.

If the individual’s AUDIT score is 20 or more, this may indicate alcohol dependence and consideration can be given to referring the individual to more structured alcohol treatment services for a full assessment and any necessary treatment. Those wanting to stop drinking who are experiencing difficulty should be considered for referral to specialist services using locally agreed referral methods. This referral can be made from the NHS Heath Check provider or from the individual’s GP.
**Additional guidance**

- Alcohol Identification and Brief Advice e-Learning course
- Alcohol-use disorders – preventing harmful drinking. NICE Public Health Guidance 24, June 2010
Chapter 5. Risk management: secondary prevention in primary care

5.0 Introduction

The NHS Health Check programme is a public health programme aimed at prevention of disease by supporting lifestyle change and by detecting and managing physiological risk factors for disease. It will, therefore, identify individuals who have undiagnosed conditions such as hypertension or chronic kidney disease (CKD) and people who are at high risk of developing cardiovascular disease or diabetes. These individuals will require additional clinical assessment and follow up and this is the responsibility of primary care. Figure 5 illustrates the prevention pathway as it flows through primary care.

This section provides advice and guidance on best practice clinical follow up and assessment that may be triggered by the NHS Health Check risk assessment.

5.1 Managing those with high cardiovascular risk

Cardiovascular disease (CVD) risk should be communicated using everyday, jargon-free language. People should be offered information about their absolute risk of CVD and about the absolute benefits and harms of an intervention over a ten-year period. NICE guidance advises that:

- the decision whether to start statin therapy should be made after an informed discussion between the GP or nurse and the individual about the risks and benefits of statin treatment, taking into account additional factors such as potential benefits from lifestyle modifications, informed patient preference, comorbidities, polypharmacy, general frailty and life expectancy
- people with a 10% or greater, ten-year risk of developing CVD should be offered appropriate lifestyle advice and behaviour change support in relation to increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet
- people with high CVD risk should be advised that the potential benefits from lifestyle modifications will also reduce their risk of dementia
- where lifestyle modification has been ineffective or is inappropriate, people with a 10% or greater, ten-year risk of developing CVD should be offered statin therapy for the primary prevention of CVD

**Key point:** individuals that are either prescribed a statin or have a CVD risk score ≥20% should exit on to an at risk register (Figure 2).
Additional guidance

- Cardiovascular disease prevention optimal value pathway. NHS RightCare Commissioning for value products. September 2016
- Cardiovascular disease prevention. NICE public health guideline 25. June 2010
Figure 5. Cardiovascular disease prevention pathway

Cardiovascular Disease Prevention: Risk Detection and Management in Primary Care

The Interventions
- High BP detection and treatment
- AF detection and anticoagulation
- Detection, CVD risk assessment, treatment
- Type 2 Diabetes preventive intervention
- Diabetes detection and treatment
- CKD detection and management

The Opportunities
- 5 million undiagnosed – 40% poorly controlled
- 30% undiagnosed. Over half untreated or poorly controlled
- 85% of FH undiagnosed & most people at high CVD risk do not receive statins
- 5 million undiagnosed. Most do not receive intervention
- 940k undiagnosed. 40% do not receive all 8 care processes
- 1.2m undiagnosed. Many have poor BP & proteinuria control

The Evidence
- BP lowering prevents strokes and heart attacks
- Anticoagulation prevents 2/3 of strokes in AF
- Behaviour change and statins reduce life time risk of CVD
- Intensive behaviour change (eg NHS DPP) reduces T2DM risk 30-60%
- Control of BP, HbA1c and lipids improves CVD outcomes
- Control of BP, CVD risk and proteinuria improves outcomes

The Risk Condition
- Blood Pressure
- Atrial Fibrillation
- High CVD risk & Familial H/cholesterol
- NDH (‘pre-diabetes’)
- Type 1 and 2 Diabetes
- Chronic Kidney Disease

Detection and 2°/3° Prevention
- 50% of all strokes & heart attacks, plus CKD & dementia
- 5-fold increase in strokes, often of greater severity
- Marked increase in premature death and disability from CVD
- Marked increase in Type 2 DM and CVD at an earlier age
- Marked increase heart attack, stroke, kidney, eye, nerve damage
- Increase in CVD, acute kidney injury & renal replacement
5.2 Cholesterol

Risk threshold for primary prevention:
• if cholesterol is identified as being raised (ratio of total serum cholesterol to high density lipoprotein cholesterol greater than 4) but the person’s 10-year CVD risk, calculated using QRisk2, is less than 10%, the individual should be offered healthy lifestyle advice, particularly focusing on smoking, alcohol intake, diet and physical activity
• if the ten-year CVD risk, calculated using QRisk2, is 10% or greater, appropriate lifestyle advice and behaviour change support should also be offered. Where lifestyle modification has been ineffective or is inappropriate, Atorvastatin 20mg should be offered for primary prevention. If the NHS Health Check is undertaken outside of general practice the individual should be referred to their GP or nurse for further assessment and management
• all Individuals whose total cholesterol level is found to be above 7.5mmol/l should be referred to their GP for consideration of Familial Hypercholesterolaemia (FH) and for cascade testing of family members if a FH diagnosis is confirmed
• CVD risk is heavily influenced by age, while younger people are less likely to have a 10-year risk of >10%, it is important to also look at total cholesterol and to determine if cholesterol is raised

Secondary prevention: The NICE lipid modification guideline recommends commencing statin treatment with atorvastatin 80 mg in people with diagnosed CVD. However, a lower dose of atorvastatin is recommended if any of the following apply: potential drug interactions; high risk of adverse effects; patient preference. NICE recommends measuring total cholesterol, high density lipoprotein (HDL) cholesterol and non HDL cholesterol in people who have been started on high intensity statin treatment at three months of treatment, aiming for > 40% reduction in non HDL cholesterol.

Related stages of the check: Individuals diagnosed with high cholesterol should be treated through appropriate care pathways and measures, as recommended by NICE. The NICE guideline provides recommendations on the management of people diagnosed with high cholesterol, including:
• communication about risk assessment and treatment options
• lifestyle modifications for the primary and secondary prevention of CVD, including advice on:
  - cardioprotective diet
  - physical activity
  - combined interventions of diet and physical activity
  - weight management
  - alcohol consumption
  - smoking cessation
  - lipid modification therapy options
Additional guidance

- Identification and management of familial hypercholesterolemia. NICE clinical guideline CG71. August 2008

5.3 Assessment for hypertension

**Threshold:** if the individual has a blood pressure at, or above, 140/90mmHg, or where the SBP or DBP exceeds 140mmHg or 90mmHg, respectively, the individual requires an assessment for hypertension by the GP practice team.

**Related stages of the check:** Where a diagnosis of hypertension is confirmed by a clinician, the individual should be added to the hypertension register and treated in line with NICE guidelines. Once diagnosed with hypertension, individuals should not be recalled as part of the NHS Health Check programme.

When blood pressure is found to be high, discussions about possible hypertension diagnosis and management may raise questions about the relationship between lifestyle and blood pressure management. Such discussion will normally take place as part of the further hypertension assessment or once a patient is placed on the hypertension register. It will however be useful for practitioners to be aware of the lifestyle interventions recommended in the NICE guideline on hypertension:

- ask people about their diet and exercise patterns, and offer guidance and written or audio-visual materials to promote lifestyle changes
- ask people about their alcohol consumption and encourage them to cut down if they drink excessively
- discourage excessive consumption of coffee and other caffeine-rich products
- encourage people to keep their salt intake low or substitute sodium salt
- offer advice to people who smoke and help to stop smoking
- tell people about local initiatives (for example, run by healthcare teams or patient organisations) that provide support and promote lifestyle change
- do not offer calcium, magnesium or potassium supplements as a method of reducing blood pressure
- relaxation therapies can reduce blood pressure and people may wish to try them. However, it is not recommended that primary care teams provide them routinely

Additional guidance

- Blood Pressure - How can we do better? November 2016
5.4 Assessment for chronic kidney disease (CKD)

If the individual has a blood pressure at or above 140/90mmHg, or where the SBP or DBP exceeds 140mmHg or 90mmHg, respectively, the individual requires further assessment to check for CKD. This is the responsibility of the GP or primary care nurse.

**Data required:** SBP and DBP.

**Threshold:** ≥140/90mmHg.

**Diagnosing CKD**

**Data required:** the results of a serum creatinine test should be used to calculate the estimated glomerular filtration rate (eGFR) in order to assess the level of kidney function, and recorded on the individual’s patient record.

**Threshold:** eGFR<60ml/min/1.73m$^2$ or ≥60ml/min/1.73m$^2$.

Where eGFR is **above or equal to 60ml/min/1.73m$^2$**, no further assessment is required, unless the individual is diagnosed with hypertension or diabetes mellitus. In this case, their risk of kidney disease will be monitored as part of the management of their hypertension and/or diabetes.

Where eGFR is **below 60ml/min/1.73m$^2$**, further assessment for CKD is required in line with NICE clinical guideline 182 on CKD. In people with a new finding of reduced eGFR, the eGFR should be repeated within two weeks to confirm that it is abnormal. This is the responsibility of the GP or primary care nurse.

**Key points:** a venous blood sample is required for this test. NPT is not considered appropriate. A serum creatinine test should be requested from the laboratory. This can be requested at the same time as a cholesterol test from the laboratory (if NPT is not used to assess cholesterol).

**Additional guidance**

5.5 Identifying individuals with an irregular pulse

Individuals found to have an irregular pulse require further assessment to determine if atrial fibrillation is present. This is the responsibility of the GP or primary care nurse and assessment will include an ECG to confirm the rhythm. If atrial fibrillation is diagnosed the individual should be managed in line with NICE guidance.

Additional guidance

5.6 Management of people found to have abnormal fasting blood sugar or HbA1c

**Threshold:** If the individual's fasting blood glucose (≥7mmol/l) or HbA1c (≥48 mmol/mol) is above the threshold for diabetes and the individual has no symptoms.

**Key points:** refer the individual non urgently to the GP practice for a repeat blood test and further assessment. They should be told that the results suggest that they may have diabetes but that they require further investigation.

**Threshold:** If the individual's fasting blood glucose (≥7mmol/l) or HbA1c (≥48 mmol/mol) is above the threshold for diabetes and the individual has symptoms to suggest diabetes.

**Key points:** refer the individual to the GP practice on the same or next day. They should be told that the results suggest that they may have diabetes but that they require further investigation urgently.

Additional guidance
- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guideline 38. 2012
- Type 2 diabetes: The management of type 2 diabetes. NICE clinical guideline 87. May 2009
Chapter 6. Communications, marketing and branding

6.1 Public Health England (PHE) communications

The NHS Health Check programme has a dedicated national website www.healthcheck.nhs.uk which is aimed at commissioners, providers and local government. Content is freely available, registration is required to access the discussion forum. All new information and resources are published on the website to support commissioners and providers with the delivery of the programme.

PHE also sends out an NHS Health Check e-bulletin every two months. The bulletin shares the latest news on the programme, you can subscribe here.

The NHS Health Check team also uses Twitter, Facebook and LinkedIn to promote the programme and respond to stakeholder comments.

6.2 Marketing and branding

In the development of the NHS Health Check branding, market research showed that the NHS brand has a high impact on engagement with the public and provides a fundamental sense of reassurance about the service. It also helps to differentiate it from other commercially available health checks. This research also found no evidence that local authority branding, on its own, encouraged public engagement with the NHS Health Check.

The findings from this work underpin PHE’s NHS Health Check marketing and branding resources, which include:

- NHS Health Check identity guidelines designed to provide the information needed to produce effective local NHS Health Check materials
- templates for press advertising, posters, letters, presentations and roller banners
- an image bank which includes photos that are free to use in local NHS Health Check campaigns
- a PR toolkit

These materials are free to use and should be applied within the brand guidelines.

6.3 Patient information

PHE has developed a patient information leaflet that can be used to accompany the invitation letter. This sets out the aims of the NHS Health Check and what a participant
can expect at their appointment. It also explains the risk factors associated with vascular disease. It is available to order or download from our website in a variety of languages and accessible formats.

Findings from recent behavioural insight research show that there are small, cost effective changes that can be implemented that have a dramatic effect on take up of the NHS Health Check. This is why we’ve changed the national letter template. We have also published some top tips on increasing take up.

PHE also makes available a dementia awareness leaflet that practitioners can use with their patients. The leaflet can be ordered in hard copy or downloaded.

6.4 NHS Choices

The NHS Choices website provides public facing information on what to expect from an NHS Health Check and what to do after having a check. It also includes a service directory that provides information on where individuals can get a check in their area. Commissioners can request that information about their service is listed on the directory or make updates to existing listings by contacting nhshealthchecks.mailbox@phe.gov.uk

A heart age calculator is also available on NHS Choices and, where appropriate, will prompt users to have an NHS Health Check. If you encounter a technical error on the service directory page on the NHS Choices website, email the NHS Choices service directory team choicesdirectories@nhschoices.nhs.uk

All NHS Health Check content (including videos, links and apps) on NHS Choices is available to stream onto any website, for free, providing an easy way to keep public information on the programme up to date on your own website. Visit the NHS Health Check website to find out more or complete the registration form and a member of the NHS Choices team will contact you to talk through the process.

6.5 One You

The One You website provides public facing information on lifestyle choices and how they can influence disease prevention in later life. NHS Health Check is a part of the One You campaign, under the ‘Checking’ section on the One You website, which provides the public with information on the NHS Health Check and links directly to the materials on NHS choices mentioned in the section above.

Local areas may sometimes also have their own One You website containing NHS Health Check information.
Chapter 7. Delivering a high quality service

7.0 Raising delivery standards

Programme standards have been developed with extensive input from local authorities to support local commissioners in assuring themselves of the quality of the service(s) they commission. They will also be of help to providers of the NHS Health Check programme in order to monitor service delivery and ensure continuous improvement in quality.

Building on this work the NHS Health Check team launched the Systematic Approach to Raising Standards (StARS) framework in the autumn of 2015. The StARS framework draws on advice and standards from existing national guidance. It adopts a systems approach involving key internal and external partners and so provides:

- an opportunity to review and reflect on the delivery of the NHS Health Check programme, to identify gaps and recognise achievement
- a baseline against which providers can compare future activity and demonstrate progress
- an opportunity to raise awareness of the programme with both internal and external stakeholders
- a legitimate reason to begin a conversation about the NHS Health Check and establish new relationships

If you are interested in attending a one-day introduction to the framework, please email nhshealthchecks.mailbox@phe.gov.uk

7.1 Workforce competencies

The NHS Health Check competence framework outlines the core and technical competences required of people carrying out NHS Health Checks. The competence framework makes use of National Occupational Standards (NOS), which describe the skills, knowledge and understanding needed to undertake a particular task or job to a nationally recognised level.

The competence framework provides a template for minimum standards when commissioning or creating training packages for people who deliver the NHS Health Check. The competences and their underpinning criteria should be used to identify the training requirements for people involved in delivering the NHS Health Check programme. Free e-learning courses on how to conduct an NHS Health Check and support behaviour change are available here.
Competence workbooks

The learner workbook guides people who are delivering the NHS Health Check on the learning outcomes and the types of assessments required to progress towards full competence against the competence framework. It can be used as a way of recording the learning undertaken in each unit and for gathering evidence to demonstrate full competence of delivering an NHS Health Check.

The assessor workbook describes the role of the assessor, working with the learner to review existing competences and assessment principles. It can also act as a tool to identify potential gaps in internal assessments and existing training. The assessment is usually done in-house, by the employing organisation but could be carried out via a college or other programme of study.

7.2 Dementia training

New dementia training resources have been developed and can be used by NHS Health Checks trainers and practitioners to improve the quality of their delivery of the dementia component of the check. Materials can freely be added to and edited by trainers to meet their local training needs. The resources can be found on the NHS Health Check website here.

The dementia e-learning training is still available for individuals providing the NHS Health Check and includes a self-assessment section, which will then provide a certificate of completion.

Providers must complete each module in its entirety before progressing to the next and it is not possible to skip through the video. With this in mind, providers should plan to complete the training in one session. The module may not work on older internet browsers, so an up-to-date browser is required to ensure full functionality.

7.3 Alcohol resources

The Alcohol Learning Centre provides online resources and learning for commissioners, planners and practitioners working to reduce alcohol-related harm. It contains alcohol-specific documents, guidance and tools, examples of alcohol harm reduction initiatives across England and provides training resources to support frontline practitioners and commissioners.

Links to the AUDIT-C, FAST and full AUDIT risk assessment tools, information leaflets and free e-learning modules on alcohol identification and brief advice are provided on the NHS Health Check website.
7.4 Health Equity Audit Guidance

To maximise the impact of the NHS Health Check programme and to ensure it is contributing to reducing health inequalities, it is important to understand not only equity of access to checks but also equity of outcomes from them. NHS Health Check Programme Health Equity Audit (HEA) guidance has been produced collaboratively with local authorities and aims to promote and support local audits. An HEA is a review process that examines how health determinants, access to health services and related outcomes are distributed in relation to the health needs of different groups and areas. HEAs are undertaken once a programme or policy has been implemented, to assess whether resources, opportunities and access are being fairly distributed according to need, by the principles of proportionate universalism.

The guidance aims to support the scoping and design of the audit and includes a detailed appendix providing ideas, case studies and resources to help with developing recommendations to address any inequities which may be identified through the audit. The HEA guidance can be found on the NHS Health Check website here.

7.5 Events

A national NHS Health Check conference is held every year. The conference is an opportunity to hear about latest developments with both workshops and a marketplace showcasing services that are helping to deliver successful local programmes. Details on all NHS Health Check events can be found here.

PHE runs a regular programme of webinars which address key topics of interest to commissioners and providers of the programme. More information is available here.
Chapter 8. Programme governance

8.0 Introduction

As part of its leadership function PHE has established a governance structure for the programme. In the interests of transparency, the structure, functions, meeting frequency and key responsibilities of each committee and sub-group, are published on the national website. For convenience, they are detailed below.

8.1 Governance structure

**NHS Health Check national advisory committee**
The NHS Health Check national advisory committee (NAC) is responsible to the Secretary of State for Health. The committee oversees the implementation of the NHS Health Check programme as set out in The Local Authorities Public Health Functions and Entry to Premises by Local Healthwatch Representatives Regulations 2013.

This committee provides a national executive forum for the NHS Health Check programme, acting in an advisory capacity to oversee successful roll-out, maintenance, evaluation and continued improvement based on emerging evidence.

**NHS Health Check national steering group**
The NHS Health Check national steering group (NSG) is accountable to the NHS Health Check national advisory committee (NAC). The group advises the NAC on the progress and performance on the delivery of PHE’s annual NHS Health Check work plan and that of the sub groups.

The NSG is responsible for monitoring performance and progress against PHE’s national delivery plan. The group provides a robust check and challenge function to support the sub-groups in delivering key commitments to time, quality and cost.

**Expert scientific and clinical advisory panel**
The expert scientific and clinical advisory panel (ESCAP) is an expert forum for the NHS Health Check programme, acting in an advisory capacity to keep the content and evidence underpinning the programme under review.

**Data, intelligence and information governance subgroup**
The data, intelligence and information governance (DIIG) subgroup ensures robust information governance processes are in place to support effective implementation of the NHS Health Check programme. It co-ordinates and oversees the further
implementation of robust data extraction and develops innovative reporting and sharing of the NHS Health Check data.

**PHE regional and centre leads NHS Health Check sub-group**
The PHE regional and centre leads NHS Health Check sub-group ensures effective matrix working and communication on the NHS Health Check programme by PHE’s national, regional and centre teams to support programme delivery.

**Local implementer national forum**
The local implementer national forum brings together groups of local authority implementers delivering the NHS Health Check programme and relevant PHE teams to ensure effective and frequent dialogue and communication on key priorities for the programme.

**8.2 Content review process**
As the NHS Health Check programme has become established, it has been recognised that the benefits of the programme might be extended to other areas. This has led to requests for removing, amending or introducing new elements to the programme.

PHE recognises the importance of considering proposals to change the NHS Health Check programme and the need to have a strong case underpinning any such request. In 2014, ESCAP agreed a content review process to support them in making evidence-based recommendations to the Department of Health and ministers on possible changes to the programme. You can find more information and guidance [here](#).
Chapter 9. Quarterly data return

9.0 Overview

The NHS Health Check is one of the components of the single data list (ref 254-00), which is a list of all the datasets that local government must submit to central government. As a result, local authorities have a statutory duty to provide data for each financial quarter on:

a. the number of NHS Health Checks offered
b. the number of NHS Health Checks received

PHE manages the NHS Health Check data return process via the NHS Health Check website. The data return portal opens at least a month before the submission deadline and the nominated individual in each local authority is required to make the data return. Annex B details exactly how to input the data into the reporting tool.

The data returned is treated as an official statistic and is quality assured following submission. It is published every financial quarter according to the timetable set out on the official statistics website and on the NHS Health Check website. Data is also published on Fingertips, Healthier Lives and as three indicators on the Public Health Outcomes Framework to allow national and local comparisons.

9.1 Data return timetable

For Quarter 1, 2 and 3, data returns need to be submitted via the reporting tool by midday of the last working day of the month following the quarter to be reported; to allow reconciliation of discrepancies at the end of the financial year, more time is allowed for the submission of Quarter 4 data (Table 2).

<table>
<thead>
<tr>
<th>Financial quarter</th>
<th>Q1 Apr–Jun</th>
<th>Q2 Jul–Sept</th>
<th>Q3 Oct–Dec</th>
<th>Q4 Jan–Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portal opens on the first working day of:</td>
<td>July</td>
<td>October</td>
<td>January</td>
<td>April</td>
</tr>
<tr>
<td>Data return required on:</td>
<td>Last working day of July</td>
<td>Last working day of October</td>
<td>Last working day of January</td>
<td>Mid-May</td>
</tr>
</tbody>
</table>
9.2 Before submitting the data

Nominated individual
The individual submitting data on behalf of a local authority must be formally nominated by the director of public health (DPH) of the local authority. To nominate an individual, a request must be sent to nhshealthchecks.mailbox@phe.gov.uk and the DPH must return a signed form confirming the change to the nominated individual. If public health functions are shared across several local authorities, a named individual may submit data on behalf of more than one local authority. Where there is a change to the nominated individual returning the data, the local authority must contact PHE well in advance of the deadline to request a change in nominee form. One local authority can have more than one nominated individual.

Data definitions
An NHS Health Check offer is defined as the number of offers or invitations made for an NHS Health Check within a single quarter. Include in the count:

- the first written or telephone invitation made in the five-year cycle to an eligible individual
- NHS Health Checks which have been requested by the patient, i.e., no formal ‘offer’ was made, but the patient was eligible, had not been offered a NHS Health Check in the five-year cycle and had requested a NHS Health Check
- NHS Health Checks which have been delivered after having been offered opportunistically, where the individual was eligible and had not been offered a NHS Health Check in the five-year cycle

Any subsequent invitations, prompts or reminders within the five-year cycle should not be counted as part of the data return to PHE.

NHS Health Checks received is defined as the number NHS Health Checks delivered by providers in a single quarter. Include in the count the:

- people meeting the eligibility criteria that had a NHS Health Check within the five-year cycle

People who have had an NHS Health Check but do not meet the eligibility criteria set out in the best practice guidance should not be included in the count. Eligible people that have had more than one check in a five-year cycle should only be counted as having received an NHS Health Check once in that period.

Quality assuring local data
To help ensure that the data submitted to PHE is accurate and of a good quality, commissioners can implement local data quality assurance processes. This should include introducing standard codes for providers to record activity against when they deliver the service.
On receipt of the data from the provider local authority, officials can also use the following prompts and questions to help identify any errors or problems with the data before submitting it to PHE.

**Are the numbers of offers and/or received NHS Health Checks very different from previous data?**
- Have all the providers returned their data?
- Has the number of providers changed? Has a provider ceased to deliver the programme?
- Is there a planned change to the way the programme is being delivered?
- Do the providers routinely concentrate their activity in one quarter? Or in one part of the year?
- Are values similar to the same quarter last financial year? Do providers tend to concentrate their activity at the beginning/end of the year?

**Is the number of offers higher than expected; number received is as expected?**
- Have repeated offers been wrongly counted as ‘offers’? (see FAQs)
- Do providers routinely send all offers in one quarter?

**Is the number of NHS Health Checks received higher than the number of offers?**
- Have the numbers for offers and received been mixed up?
- Check that the number of NHS Health Checks received opportunistically have also been counted towards the total number of offers?

**Is the number of offers and received higher than expected?**
- Are non-eligible individuals being offered an NHS Health Check?
- Are the different assessments completed as part of the check being counted as individual NHS Health Checks, for example, taking blood pressure without the other elements of the check being completed?
- Are people who have already received a NHS Health Check being offered another check before the end of the five-year cycle?
- Have providers returned data for activity done in more than one quarter?

**Is the number of offers and received lower than expected?**
- Have all providers returned their activity data for the quarter?
- Have the number of providers changed? Has one provider ceased to deliver the programme?
- Has there been a planned change to the way the programme is delivered?
- Do the providers concentrate their activity in one quarter or in one part of the year?
- Are values similar to the same quarter last financial year? Do providers tend to concentrate their activity at the beginning/end of the year?
Local authorities who still have concerns about the data after having done the above checks might want to discuss with the quality assurance (QA) lead in the clinical commissioning group (CCG). CCG QA leads might be able to support local primary care providers of NHS Health Checks, for example, by providing advice on the best way to carry an audit of their data.

9.3 Submitting the data

To facilitate the return of data, PHE provide a secure data portal. Data must be submitted by the nominated individual in the local authority, see section 9.2. To log-in, the nominated individual will need to enter their email address, username (local authority name) and password.

Once logged in, click on the ‘Submit data’ link under Quarterly NHS Health Check Data submission type. The webpage will show two input boxes, one for NHS Health Checks offered and one for NHS Health Checks received. To eliminate the risk of typing error, each number must be entered into the relevant input box twice. For a step-by-step guide on how to do this, including screenshots, see Annex B. If an error is made during the submission process, the data can be edited through the secure data portal until the data portal closes.

9.4 After the data has been submitted

The data that PHE receives from local authorities goes through five stages of quality assurance:
Stage 1: the data portal performs an automated validation to ensure that the data entered is in the correct format. To eliminate the risk of a data entry error, each number must be entered twice.
Stage 2: routine quality checks are undertaken on the data set by PHE analysts.
Stage 3: local authority level data are plotted using Spiegelhalter control chart methodology (modified by Laney to handle the effect of over dispersion) and statistically significant variation is identified.
Stage 4: other checks on local authority data include comparing it to: the expected values, the England average and previously submitted data. These thresholds have been agreed by the NHS Health Check Data Intelligence and Information Governance group. Unexpected trend or changes are also identified and explored.
Stage 5: All outputs – calculations, graphs and reports – are reviewed by a second analyst.

Local authorities that have submitted data that does not comply with the data quality checks will be contacted by PHE analysts. PHE analysts will:
• liaise with the local authority to try and resolve any data query prior to the publication deadline
- retain a record of local authority data quality issues
- review and reference local authority data quality issues raised in previous quarters if necessary

**Data publication**

As an official statistic, the exact dates of NHS Health Check quarterly data publication must be publicly announced in advance on the UK national statistics publication hub. Publication dates are also announced on the online portal.

The data will be published four weeks after the portal has closed. Once data is published, the formulae in the reporting tool calculate the percentage of invitations offered and received, and the take-up rate for each quarter. As the year progresses, the quarterly data is aggregated to show cumulative data and this will be shown as annual and five yearly totals.

Below is a worked example of the calculations behind the data returns:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F = ( \frac{D}{C} \times 100 )</th>
<th>G = ( \frac{E}{C} \times 100 )</th>
<th>H = ( \frac{E}{D} \times 100 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total population aged 40-74</td>
<td>Eligible population (see table 3)</td>
<td>Number of NHS Health Checks offered</td>
<td>Number of NHS Health Checks received</td>
<td>% of NHS Health Checks offered</td>
<td>% of NHS Health Checks received</td>
<td>% Uptake of NHS Health Checks</td>
</tr>
<tr>
<td></td>
<td>22,413</td>
<td>15,494</td>
<td>7,000</td>
<td>4,000</td>
<td>45.18%</td>
<td>25.8%</td>
<td>57.1%</td>
</tr>
</tbody>
</table>

The full dataset can also be downloaded from the online portal.

Other online tools displaying the data are listed below:

- fingertips.phe.org.uk/profile/nhs-health-check-detailed/data
  Activity data by quarter, by year as well as cumulative figures are presented on this tool. Trend (graph) over time and benchmarking options are also available.

- www.phoutcomes.info/public-health-outcomes-framework
  Section ‘Health Improvement’ of the Public Health Outcomes Framework (PHOF): updated annually
  Cumulative activity data over five years.

- www.nhs.uk/Service-Search/performance/Results?ResultsViewId=1016
  Take-up of NHS Health check by those eligible.
10. Calculating the eligible population

In the last quarter of each financial year, directors of public health will be sent details of their total eligible population for the following year.

To identify the total eligible population, PHE use the most recent Office for National Statistics mid-year population estimates, minus the estimated ineligible population.

The ineligible population is calculated by estimating the numbers of people already on a disease register. It is important to note that the eligible population is independent from the number of invitations already made during the five-year cycle. When estimating the total eligible population, an individual who has received a NHS Health Check in the last five years – although not eligible for re-call until five years after their first NHS Health Check – remains in the total eligible population.

The Department of Health’s original modelling work estimated that 30% of the population aged 40 to 74 would not be eligible for a check, and this was applied to eligible population calculations up until 2015/16. From 2016/17, the same modelling for England has been used, but the estimate has been refined to reflect the actual age/sex specific population profile of each local authority, as shown in Table 3. These adjustments are identical to those used in the NHS Health Check ready reckoner.

Table 3. Proportion of ineligible individuals in each age/sex group in England

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age group</th>
<th>Ineligible for NHS Health Check due to pre-existing conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40-44</td>
<td>8.50%</td>
</tr>
<tr>
<td>Males</td>
<td>45-49</td>
<td>15.08%</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>23.58%</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>33.29%</td>
</tr>
<tr>
<td></td>
<td>60-64</td>
<td>44.53%</td>
</tr>
<tr>
<td></td>
<td>65-69</td>
<td>56.69%</td>
</tr>
<tr>
<td></td>
<td>70-74</td>
<td>66.36%</td>
</tr>
<tr>
<td>Females</td>
<td>40-44</td>
<td>8.77%</td>
</tr>
<tr>
<td></td>
<td>45-49</td>
<td>14.04%</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>21.67%</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>30.60%</td>
</tr>
<tr>
<td></td>
<td>60-64</td>
<td>40.93%</td>
</tr>
<tr>
<td></td>
<td>65-69</td>
<td>52.76%</td>
</tr>
<tr>
<td></td>
<td>70-74</td>
<td>62.67%</td>
</tr>
</tbody>
</table>
An example of how this will be applied to a local authority population is shown in Annex C.

Some areas are able to identify the local eligible population by running specific searches on clinical systems. Therefore, at the time of sending out the estimated eligible population figures, PHE will invite local authorities to submit alternative eligible population numbers calculated using a local clinical system search.

Alternative eligible population figures submitted to PHE will be considered by the NHS Health Check Data Intelligence and Information Governance group. They will be evaluated against the following criteria. The:

- population selected covers the local authority geographical footprint
- clinical system search approach is clearly defined
- criteria searched for match the inclusion/exclusion criteria set up in the Public Health Functions Regulations

Alternative population figures must be submitted to nhshealthchecks.mailbox@phe.gov.uk by mid-April each year using the standard form sent to directors of public health by the NHS Health Check team.
Annex A. QOF indicators 2016/17

Table 4 shows where the NHS Health Check provides a mechanism for supporting primary care in achieving 2016/17 QOF indicators.

<table>
<thead>
<tr>
<th>Clinical area</th>
<th>QOF indicator</th>
<th>QOF ID code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrial fibrillation</td>
<td>The contractor establishes and maintains a register of patients with atrial fibrillation</td>
<td>AF001</td>
</tr>
<tr>
<td>Hypertension</td>
<td>The contractor establishes and maintains a register of patients with established hypertension</td>
<td>HYP001</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90mmHg or under</td>
<td>HYP006</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed</td>
<td>DM017</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90</td>
<td>DM002</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80mmHg or less</td>
<td>DM003</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5mmol/l or less</td>
<td>DM004</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59mmol/mols or less in the preceding 12 months</td>
<td>DM007</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64mmol/mols or less in the preceding 12 months</td>
<td>DM008</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with diabetes, on the register, whom the last IFCC-HbA1c is 75mmol/mols or less in the preceding 12 months</td>
<td>DM009</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients newly diagnosed with diabetes</td>
<td>DM014</td>
</tr>
<tr>
<td>Condition</td>
<td>Description</td>
<td>Code</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Diabetes</td>
<td>diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within nine months after entry on to the diabetes register</td>
<td></td>
</tr>
<tr>
<td>Dementia</td>
<td>The contractor establishes and maintains a register of patients diagnosed with dementia</td>
<td>DEM001</td>
</tr>
<tr>
<td>Mental health</td>
<td>The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months</td>
<td>MH003</td>
</tr>
<tr>
<td></td>
<td>The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 12 months</td>
<td>MH007</td>
</tr>
<tr>
<td>Chronic kidney disease</td>
<td>The contractor establishes and maintains a register of patients aged 18 or over with CKD stage 3 to 5</td>
<td>CKD001</td>
</tr>
<tr>
<td>Cardiovascular disease – primary prevention</td>
<td>In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, 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 assessment tool agreed with the NHS CB) of ≥20% in the preceding 12 months: the percentage who are currently treated with statins</td>
<td>CVD-PP001</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>The percentage of patients aged 45 or over who have a record of blood pressure in the preceding five years</td>
<td>BP002</td>
</tr>
<tr>
<td>Obesity</td>
<td>The contractor establishes and maintains a register of patients aged 18 or over with a BMI ≥ 30 in the preceding 12 months</td>
<td>OB001</td>
</tr>
<tr>
<td>Smoking</td>
<td>The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months</td>
<td>SMOK002</td>
</tr>
<tr>
<td></td>
<td>The contractor supports patients who smoke in stopping smoking by a strategy which includes providing literature and offering appropriate</td>
<td>SMOK003</td>
</tr>
<tr>
<td>therapy</td>
<td></td>
<td>SMOK004</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>The percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 24 months</td>
<td>SMOK004</td>
<td></td>
</tr>
<tr>
<td>The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 12 months</td>
<td>SMOK005</td>
<td></td>
</tr>
</tbody>
</table>
Annex B. Submitting quarterly data

A step-by-step guide, including screenshots, is available on the NHS Health Check website.

FAQs
Q. What if I am reporting no activity this quarter?
A. You should still log in to the data returns section of the website and enter ‘0’ in both the offered and received fields.

Q. I have incomplete data for this quarter. Should I not submit at all?
A. You should submit whatever data you have because not reporting will be recorded as a nil return.

Q. Why is the data collected prior to 2013/14 not included in the overall figures?
A. Historical data was published by NHS England. Since April 2013, local authorities have had mandated a statutory duty to offer 100% of their eligible population an NHS Health Check over five years. The first reporting period for this in the Public Health Outcomes Framework is 2013/14 – 2018/19 so we have presented the data in such a way so as to reflect this.

Q. Why do some areas, show that more NHS Health Checks have been received than offered?
A. This can occasionally happen if a large number of people were invited in the previous quarter and the invites were not taken up until the next or subsequent quarters. However, we would ask all local authorities to ensure that where an NHS Health Check has been requested or offered opportunistically, it is being counted as ‘offered’. Not doing so will also affect the figures.

Q. Do we include people we have sent a second invite or employed different methods of following up, such as SMS/telephone call, as being offered a check in the five-year period?
A. Reminders, prompts and follow-up invites to people that have already been invited for a check should not be included. An invite is ‘per individual every five years’ and second and third invites to the same individual within that time should not be included in quarterly returns. Nevertheless, PHE recommends that local authorities continue to engage and encourage people to take up the offer by whatever means they deem appropriate as it will affect overall uptake.

Q. I have received further data on checks offered and received but the data for the quarter has now been published. Do I include this in the data return for the next quarter?
A. NHS Health Checks data on appointments offered and received are published as official statistics, which means our process to make changes to already published data must comply with the ‘Code of Practice for Official Statistics’. Therefore, if inaccuracies in the data or new data is identified after the data publication, the data will be corrected at the time of the next data publication.

To request a revision of quarter 1, quarter 2 or quarter 3 data, please present your case formally in writing to nhshealthchecks.mailbox@phe.gov.uk detailing why a complete return was not possible and clearly state both your previously submitted and newly revised figures. Following an internal approval process, PHE will amend the figures on the website when the next quarter data is formally published.

Q. I can’t log in to the data returns section. How do I reset my password?
A. As long as you are registered as the nominated individual you can click on ‘password reset’ to change the password on the log in page. If you are not the nominated individual you will need to email: nhshealthchecks.mailbox@phe.gov.uk

Q. My eligible population is wrong. How do I change it?
A. Prior to quarter 1 data submission each year, PHE will revise the estimated eligible population based on the latest ONS data. Local authorities can request that their figure is revised if they are able to evidence that a search of local clinical systems has been undertaken. This request needs to be completed and returned for review by the national team no later than the end of May. The total eligible population cannot be changed once quarter 1 data has been submitted.

Q. When are the dates for each quarterly return?
See the data return timetable in this document or the NHS Health Check website.
Annex C. Eligible individuals

Local authorities have a statutory obligation to make arrangements for everyone eligible aged 40 to 74 to be offered a NHS Health Check once in every five years and, where people remain eligible, for them to be recalled for another check every five years after that.

Those diagnosed with the following are excluded from the programme:
- coronary heart disease
- chronic kidney disease (CKD)\(^{17}\)
- diabetes
- hypertension
- atrial fibrillation
- transient ischaemic attack
- hypercholesterolaemia
- heart failure
- peripheral arterial disease
- stroke

Others excluded from the programme are:
- people being prescribed statins
- people who have previously been found by the health service in England to have a 20% or higher risk of developing cardiovascular disease over the next ten years. These patients are excluded because it is presumed their conditions are being managed via other routes

The read codes corresponding to these criteria are available here and on the NHS Digital website

Using dummy data in column (iii) in Table 5 below demonstrates step by step how the total eligible population will be calculated. The final figure sent by PHE to the director of public health of this hypothetical local authority would be: 15,494.

\(^{17}\) Stage 3, 4 or 5 of CKD within the meaning of the NICE guideline 73 on Chronic Kidney Disease, published in September 2008.
Table 5.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age group</th>
<th>(iii) Estimated number of individuals in the age/sex group (based on latest ONS mid-year estimate)</th>
<th>(iv) Estimated number ineligible for NHS Health Check due to pre-existing conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40-44</td>
<td>1,878</td>
<td>=1,878 x 0.085 = 159.6</td>
</tr>
<tr>
<td></td>
<td>45-49</td>
<td>1,940</td>
<td>=1,940 x 0.1508 = 292.6</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>1,793</td>
<td>=1,793 x 0.2358 = 422.8</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>1,540</td>
<td>=1,540 x 0.3329 = 512.7</td>
</tr>
<tr>
<td></td>
<td>60-64</td>
<td>1,440</td>
<td>=1,440 x 0.4453 = 641.2</td>
</tr>
<tr>
<td></td>
<td>65-69</td>
<td>1,420</td>
<td>=1,420 x 0.5669 = 805.0</td>
</tr>
<tr>
<td></td>
<td>70-74</td>
<td>999</td>
<td>=999 x 0.6636 = 662.9</td>
</tr>
<tr>
<td>Female</td>
<td>40-44</td>
<td>1,912</td>
<td>=1,912 x 0.0877 = 167.7</td>
</tr>
<tr>
<td></td>
<td>45-49</td>
<td>1,986</td>
<td>=1,986 x 0.1404 = 278.8</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>1,825</td>
<td>=1,825 x 0.2167 = 395.5</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>1,575</td>
<td>=1,575 x 0.306 = 482.0</td>
</tr>
<tr>
<td></td>
<td>60-64</td>
<td>1,500</td>
<td>=1,500 x 0.4093 = 614.0</td>
</tr>
<tr>
<td></td>
<td>65-69</td>
<td>1,498</td>
<td>=1,498 x 0.5276 = 790.3</td>
</tr>
<tr>
<td></td>
<td>70-74</td>
<td>1,107</td>
<td>=1,107 x 0.6267 = 693.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td><strong>22,413</strong></td>
<td><strong>6,919</strong></td>
</tr>
</tbody>
</table>

Estimated total eligible population = 22,413 - 6,919 = 15,494
Annex D. NHS Health Check guidance and resources

Programme standards
• NHS Health Check programme standards – Feb 2014

Training, development and learning
• NHS Health Check competence framework – June 2014
• case studies
• dementia training tool
• e-learning

Information governance and data
• NEW: NHS Health Check IG and data flows pack – Oct 2016
• NHS Health Check single data list returns guide – Oct 13 refresh – Oct 2013

Background and evidence
• NEW: Cardiovascular disease: getting serious about prevention – Sept 2016
• ready reckoner tool – V.9 28th May 2014
• NHS Health Check: our approach to the evidence – July 2013
• Living well for longer: a call to action to reduce avoidable premature mortality – March 2013
• NHS Health Check programme impact assessment
• economic modelling for the NHS Health Check programme
• costs and benefits of implementing the NHS Health Check programme
• NICE guidelines on prevention of CVD

Communications, marketing and branding
• NEW: Top tips for increasing the uptake of NHS Health Checks
• Department of Health order line for hard copies of patient information leaflets
• download NHS Health Check patient information leaflets
• download NHS Health Check dementia patient information leaflets
• national invitation letter template
Annex E. Relevant guidance

BMI
- Body mass index thresholds for intervening to prevent ill health among black, Asian and other minority ethnic groups. NICE advice LGB13. January 2014

Cholesterol test
- Familial hypercholesterolaemia: identification and management. NICE clinical guideline 71. August 2008

Systolic and diastolic blood pressure

Physical activity assessment
- Physical Activity: Brief advice for adults in primary care. NICE public health guideline 44. 2013.

Alcohol risk assessment
- Alcohol-use disorders: preventing harmful drinking. NICE public health guideline 24. June 2010

Fasting plasma glucose (FPG)
- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guidance 38. July 2012
- Use of Glycated Haemoglobin (HbA1c) in the Diagnosis of Diabetes Mellitus

- Consensus statement: Use of haemoglobin A1c (HbA1c) in the diagnosis of diabetes mellitus. The implementation of World Health Organisation (WHO) guidance 2011, Practical Diabetes, 2011, 1, 12a

Local stop smoking services referral
- NCSCT local stop smoking services: service and delivery guidance. NCSCT. 2014. September 2014
- Brief interventions and referral for smoking cessation in primary care and other settings. NICE Public Health Guidance PH1. March 2006

Weight management
- Non-alcoholic fatty liver disease: assessment and management. NICE guideline NG49. July 2016
- Preventing excess weight gain. NICE guideline NG7. March 2015
- Overweight and obese adults – lifestyle weight management. NICE public health guideline 53. May 2014
- BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups. NICE public health guideline 46. July 2013
- Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children. NICE clinical guideline 43. December 2006

Physical activity interventions
- Physical activity benefits for adults and older adults. Department of Health, October 2015
- Exercise referral schemes to promote physical activity. NICE public health guidance 54. PH54 September 2014
- Physical activity: brief advice for adults in primary care. NICE public health guidance 44. May 2013. The recommendations supersede recommendations 1-4 in four commonly used methods to increase physical activity, NICE Public Health Guidance 2
• Start Active, Stay Active. A report on physical activity for health from the four home countries’ Chief Medical Officers. Department of Health. July 2011
• Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling. NICE Public Health Intervention Guidance 2. March 2006

Alcohol use interventions
• Alcohol Identification and Brief Advice e-Learning course
• Alcohol-use disorders - preventing harmful drinking. NICE Public Health Guidance 24, June 2010

Cholesterol
• Lipid modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline CG181. July 2014

Familial hypercholesterolaemia
• Identification and management of familial hypercholesterolaemia. NICE clinical guideline CG71. August 2008

Assessment for hypertension
• Blood Pressure - How can we do better? November 2016.
• Hypertension: clinical management of primary hypertension in adults. NICE clinical guideline 127. August 2011

Assessment for chronic kidney disease
• Hypertension: clinical management of primary hypertension in adults. NICE clinical guideline 127. August 2011
Management of people found to have abnormal fasting blood sugar or HbA1c

- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guideline 38. 2012
- Type 2 diabetes: The management of type 2 diabetes. NICE clinical guideline 87. May 2009