

Protecting and improving the nation's health

NHS Health Check Best practice guidance

For commissioners and providers

October 2019

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

About Public Health England	2	
Chapter 1. Introduction	6	
 1.0 The NHS Health Check Programme 1.3 National CVD commitments 1.4 Making the case for investment 1.5 National aims and objectives of the NHS Health Check Chapter 2. Delivery requirements 2.1 NICE Guidance & Quality Standards 2.2 The Local Authorities Regulations 2.3 Eligibility criteria 2.4 The measures required 2.5 Clinical follow-up 2.6 Equality Act 2010 2.7 The General Data Protection Regulation 2.8 Collecting and reporting NHS Health Check data Chapter 3. Service design 3.1 Local decisions 		6 7 8 10 10 10 11 11 12 12 13 14
Chapter 4. The risk assessment	15	
 4.0 Introduction 4.1 Cardiovascular risk assessment 4.4 Diabetes risk assessment 4.5 Near patient/point of care testing (POCT) and quality control 4.6 Raising Awareness of Risk Factors for Dementia Chapter 5. CVD risk communication and supporting behaviour change 	31	15 15 23 28 30
5.0 Risk communication 5.1 Stop smoking interventions 5.2 Weight management interventions 5.3 Physical activity interventions 5.4 Alcohol use interventions 5.5 Healthier You: NHS Diabetes Prevention Programme Chapter 6. Clinical risk management	38	31 32 32 33 36 37
 6.0 Introduction 6.1 Managing those with high cardiovascular risk 6.2 Cholesterol 6.3 Assessment for hypertension 6.4 Assessment for chronic kidney disease (CKD) 6.5 Identifying individuals with an irregular pulse 6.6 Management of people found to have abnormal fasting blood sugar or HbA1c 6.7 Assessment for cirrhosis 		38 38 40 41 42 43 43

Chapter 7. Communications, marketing and branding	45	
7.1 Public Health England (PHE) communications 7.2 Marketing and branding 7.3 Patient information Chapter 8. Delivering a high-quality service	47	45 45 45
8.0 Raising delivery standards 8.1 Workforce competencies 8.2 Dementia training 8.3 Alcohol resources Chapter 9. Programme governance	50	47 47 48 48
9.0 Introduction 9.1 Content review process Chapter 10. Quarterly data return	51	50 50
10.0 Overview 10.2 Data return timetable 10.3 Before submitting the data 10.4 Submitting the data 10.5 After the data has been submitted Annex A. Other health checks	57	51 51 52 54 54
Annex B. Relevant guidance	58	
Annex C. NHS Health Check guidance and resources	62	
Annex D. QOF indicators 2016/17	63	
Annex E. Submitting quarterly data	66	
Annex F: Estimating the eligible population	68	
Annex G Eligible individuals	70	

Chapter 1. Introduction

1.0 The NHS Health Check Programme

The NHS Health Check is a prevention programme which aims to reduce the chance of a heart attack, stroke or developing some forms of dementia in people aged 40-74. It achieves this by assessing the top seven risk factors driving the burden of non-communicable disease in England, and by providing individuals with behavioural support and, where appropriate, pharmacological treatment.

The purpose of this document is to support local public health commissioners and providers of the NHS Health Check programme with the information needed to commission and deliver a high-quality programme.

This document replaces Public Health England's 2017 best practice guidance. It is designed to be used in conjunction with the NHS Health Check Programme Standards, National Institute for Health and Care Excellence (NICE) Clinical Guidance 181² and the NHS Health Check workforce skills and competency framework.

1.1 Changes to the best practice guidance

Table 1. Key changes from the 2017 best practice guidance

Change	Section
Service design: highlights the points in the NHS Health Check pathway where there is flexibility for local decision making on the delivery of the programme.	Section 3.1
QRISK®3: new advice on using QRISK® 3 as part of the NHS Health Check risk assessment.	Section 4.1
Clinical follow-up: new advice on the clinical management of people with an AUDIT risk score of 16 or more.	Section 6.7

1.2 Improving health

While we can all enjoy the prospect of living longer, we are not necessarily living *healthier* for longer. There is a rising trend of people living with one or more long-term health condition, the cost of which is significant, amounting to 70% of the total health and social care budget.⁴

Studies show that the risk to a person's health increases directly with a number of risk factors, including unhealthy behaviours. Worryingly, 70% of adults in England report two or more unhealthy behaviours, with the poorest communities disproportionately affected.

An adult in mid-life who smokes, drinks above low risk levels, is inactive and eats unhealthily is four times more likely to die in the next 10 years than someone who does none of these things.⁶

The global burden of disease study shows that many long-term conditions can be avoided and that 85% of CVD is preventable. Increasing physical activity levels, stopping smoking, maintaining a healthy weight and low risk levels of alcohol consumption all help reduce the risk of CVD.

This is why the provision of the NHS Health Check programme in England has never been more important. The check addresses the top seven risk factors driving not only the burden of CVD, but other non-communicable diseases.

1.3 National CVD commitments

Both the Government and NHS continue to recognise the importance of CVD prevention and the opportunity that the NHS Health Check offers to support this. In 2018 PHE published its action plan and future commitments in the CVD prevention initiatives⁸ publication and its National CVD prevention ambitions in 2019.⁹

In 2019 NHS England's Long-term plan¹⁰ confirmed its commitment to the broader CVD prevention agenda and within that to:

'work with local authorities and PHE, to improve the effectiveness of approaches such as the NHS Health Check, rapidly treating those identified with high-risk conditions'. Pg. 62 (3.68)

The Long-term plan also committed to a doubling of the Healthier You diabetes prevention programme over the next five years. ¹⁰ The NHS Health Check programme has a key role to play in supporting the implementation of this service. It provides a systematic mechanism, delivered across England, for identifying people who would benefit from the diabetes prevention service.

Additionally, the Government set its ambition to ensure that people can enjoy at least five years of healthy extra life by 2035, while narrowing the gap between the richest and the poorest. 11 Through early identification and management of risk factors and disease, the NHS Health Check can help achieve this ambition.

The Prevention Green Paper recognises that the programme has achieved a huge amount over the last 10 years. It also sets out the Government's intention to maximise its impact over the next 10 years by exploring, through a review, what else can be done to improve the programme's effectiveness.¹²

1.4 Making the case for investment

There are several resources which can provide locally-tailored information that will help to make the case for local action on cardiovascular disease (CVD) prevention. PHE's CVD primary care intelligence packs provide data and analysis on the prevalence, variation, treatment and CVD outcomes in clinical commissioning group (CCG) areas.¹³ The document 'The Size of the Prize' summarises the burden and therefore the size of the opportunity that tackling Atrial Fibrillation, high blood pressure and CVD risk can offer for each sustainability and transformation partnership (STP) in England.¹⁴ The return on investment of taking action can be estimated at a CCG or STP level using the CVD return on investment tool.¹⁵

For the NHS Health Check programme to have the greatest impact there needs to be integration between local government and NHS services. The NHS Health Check provides a statutory mechanism for identifying people's risk of CVD, but to drive improvements in health outcomes both local authorities and the NHS need to act.

1.5 National aims and objectives of the NHS Health Check

The NHS Health Check programme aims to improve the health and wellbeing of adults aged 40-74 years through the promotion of early awareness, assessment, and management of the major risk factors for CVD – risk factors that are associated with premature death, disability and health inequalities in England.

Objectives:

- 1. To promote and improve the early identification and management of the individual behavioural and physiological risk factors for vascular disease and the other conditions associated with those risk factors.
- 2. To support individuals to effectively manage and reduce behavioural risks and associated conditions through information, behavioural and evidence based clinical interventions.

- 3. To help reduce inequalities in the distribution and burden of behavioural risks, related conditions and multiple morbidities.
- 4. To promote and support appropriate operational research and evaluation to optimise programme delivery and impact, nationally and locally.

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 the 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.

There are a number of other 'health checks' that target specific population groups. These checks differ from the NHS Health Check both in scope, target audience and frequency (Annex A). Patients who are eligible for those checks are also eligible for the NHS Health Check (provided they are not excluded, based on the usual NHS Health Check exclusion criteria).

Chapter 2. Delivery requirements

2.1 NICE Guidance & Quality Standards

Protocols underpinning the delivery of the NHS Health Check should meet the requirements of the NICE Clinical Guidance 181 Cardiovascular disease: risk assessment and reduction, including lipid modification² and the relevant NICE guidance listed in Annex B, other PHE guidance and resources are listed in Annex C.

2.2 The Local Authorities Regulations

The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 S.I. 2013/351¹⁶ require local authorities to:

- make arrangements for each eligible person aged 40-74 to be offered an NHS
 Health Check every five years, and for each individual to be recalled every five
 years if they remain eligible
- include specific tests and measures in the risk assessment
- ensure the individual having their NHS Health Check is told their cardiovascular risk score, and other results are communicated to them
- ensure that specific information and data is recorded during a check and, where
 the risk assessment is conducted outside the individual's GP practice, for that
 information to be forwarded to the individual's GP.
- continuously improve the percentage of eligible individuals having an NHS Health Check.

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.

2.3 Eligibility criteria

The regulations state that people aged 40 - 74 years who do **not** have any of the following conditions are eligible for a check

- 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 defined as familial hypercholesterolemia
- heart failure
- peripheral arterial disease
- stroke
- is currently being prescribed statins for the purpose of lowering cholesterol
- 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

Where someone has a CVD risk of 10-19%, they would not be excluded from recall. This is unless they meet one of the other exclusion criteria, for example, if the individual is being prescribed a statin.

2.4 The measures required

The regulations also require that the measures listed below are recorded as part of a check. Where the risk assessment is conducted outside of the individual's GP practice, there is also a legal duty for the following information to be forwarded to the individual's 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

The regulation also requires that an 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. 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.

2.5 Clinical follow-up

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. Local authorities will need to work closely with their partners across the healthcare system, including through health and wellbeing boards, Strategic Transformation Partnerships, Integrated Care Partnerships and Primary Care Networks to ensure these different elements of the programme link together.

2.6 Equality Act 2010

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 guide¹⁷ 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.

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.¹⁷ For example, the way that wheelchair users access their NHS Health Check, as well as the way their risk assessment is undertaken and how they are supported to improve their lifestyle will require specific consideration and action.

2.7 The General Data Protection Regulation

Data flow between parties involved in the NHS Health Check programme is subject to the Data Protection Act and information governance rules. 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
- data extraction from GP practices for local monitoring, evaluation and quality assurance of NHS Health Check. It is up to local commissioners to decide the level of data required to properly assess the impact of the programme

Flows of personal data between parties involved in the NHS Health Check programme are subject to the General Data Protection Regulation¹⁸ and the Data Protection Act 2018¹⁹. Further information on the data protection responsibilities of organisations processing personal data can be found on the Information Commissioner's Office website²⁰.

2.8 Collecting and reporting NHS Health Check data

Local authorities have a legal duty to 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)²¹, which prescribes the datasets that local government must routinely submit to central government. 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. Service design

3.1 Local decisions

Legislative delivery requirements provide an important framework for what must be included as a core part of the NHS Health Check. This framework ensures that there is uniformity and scale of provision across England while also providing the flexibility to enable local decisions on:

- Whether to extend the NHS Health Check programme to include, for example, a wider age range of people or additional tests or questions. In doing so, commissioners may wish to draw on recommendations made by the NHS Health Check expert panel on content changes.
- How the service is promoted locally and eligible people are made aware of what the check is and how to get one.
- How individuals will be identified and invited to attend a check; for example, using a letter, text message or another route.
- Where the checks are delivered; for example, the settings that might be used and the geographic locations for provision. PHE's case studies and webinars share a wide range of examples.
- How the checks will be provided; for example, the use of point-of-care testing or venous blood samples, the integration of digital or completion of some parts of the check in advance.
- How practitioners should communicate CVD risk, support patient activation and enable behaviour change.
- Who will deliver the check; this could be a wide range of professionals who can demonstrate that they meet the standards set out in the competency framework³.
- How to structure remuneration for the delivery of the service, PHE has published some top tips on this.²²
- How to secure continuous improvement and to use data published in the public health outcomes framework to help monitor activity.²³
- How best to use the programme to tackle health inequality.

At each of these decision points PHE encourages all local authorities to adopt a proportionate universalism (PU) approach. The application of PU in many areas has ensured that the resourcing and delivery of a universal NHS Health Check programme is done at a scale and intensity proportionate to the degree of need. Evidence shows that this increases the likelihood of equity of health outcomes.²⁴

Chapter 4. The risk assessment

4.0 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 1.

4.1 Cardiovascular risk assessment

QRISK

Data required: Estimated 10-year risk of developing CVD should be calculated using QRISK®3.

Key Points: In 2019, ClinRisk replaced the 10-year CVD risk factor calculator QRISK® 2 with QRISK® 3 which uses a further eight fields of data. The inclusion of additional clinical variables in QRISK® 3 (chronic kidney disease (scope of CKD widened to include stage 3), a measure of systolic blood pressure variability (standard deviation of repeated measures), migraine, corticosteroids, Systemic lupus erythematosus (SLE), atypical antipsychotics, severe mental illness, and erectile dysfunction) can help enable clinicians to more accurately identify those at most risk of heart disease and stroke.²⁵

Given this transition from QRISK2 to QRISK3 agreement was gained between Medicines and Healthcare Products Regulatory Agency (MHRA), PHE and ClinRisk on how QRISK®3 could be used within the NHS Health Check Programme. This agreement was taken to the NHS Health Check Expert Scientific and Clinical Advisory Panel (ESCAP), who considered and made and will continue to keep under review the following recommendations for practice.

In general practice (using one of the GP clinical systems TPP SystmOne, EMIS Web, InPS Vision and Microtest Evolution)

If a person has any of the newly included variables recorded in the clinical system medical records this information should automatically be pulled through into the QRISK® 3 calculator. This means that there does not need to be extra questions about the new variables added to the NHS Health Check. The resulting QRISK® 3 score can be acted upon according to the result.

If a person does have any of the new variables coded, their QRISK® 3 will be higher, this is a knowledge and training issue for the communication of risk.

Outside of general practice or GP clinical system third party software*

Wherever the check is delivered outside of general practice or where a third-party supplier is being used in a GP practice, QRISK® 3 may, for the time being, be used with the QRISK® 2

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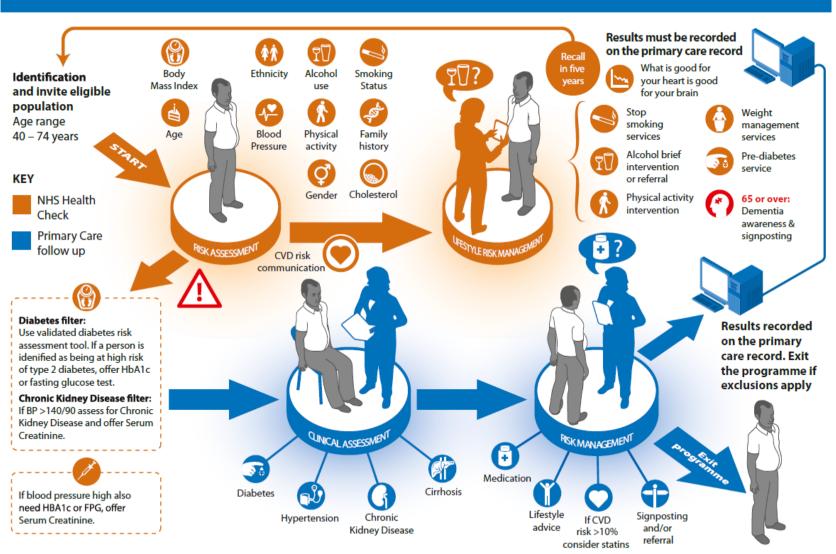
fields only. A score calculated in this way is considered a 'limited QRISK® 3 score".

When the results are sent back to general practice/ general practice clinical system, the person may benefit from having a full QRISK® 3 score calculated. This would be outside of the NHS Health Check.

Currently the NICE guidance recommendation is "Use the QRISK®2 risk assessment tool to assess CVD risk for the primary prevention of CVD in people up to and including age 84 years." However, a surveillance review of the NICE guidance in January 2018 concluded that a partial update of the guidance is warranted to provide advice on the use of QRISK® 3.

Figure 1. NHS Health Check risk assessment and management

NHS Health Check



Age

Data required: age recorded in years.

Key points: The age of the individual should be 40-74 years (inclusive).

Gender

Data required: the gender should be recorded as reported by the individual.

Key points: 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.

Smoking status

Data required: non-smoker (never smoked), ex-smoker (previously smoked), light smoker of (fewer than 10 a day), moderate smoker of (11-19 a day), heavy smoker (≥ 20 a day).

Key points: a person's smoking status is defined as smoking tobacco, vaping status is excluded from this definition.

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 of the individual, divided by their height squared.

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® 3 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 be used by the diabetes validated risk assessment tools and diabetes filter to identify individuals at risk of type 2 diabetes.

Additional guidance

- Obesity: identification, assessment and management. NICE Clinical Guideline CG189. November 2014
- 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

- Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline 181. July 2014
- Familial hypercholesterolemia: identification and management. NICE clinical guideline 71. August 2008

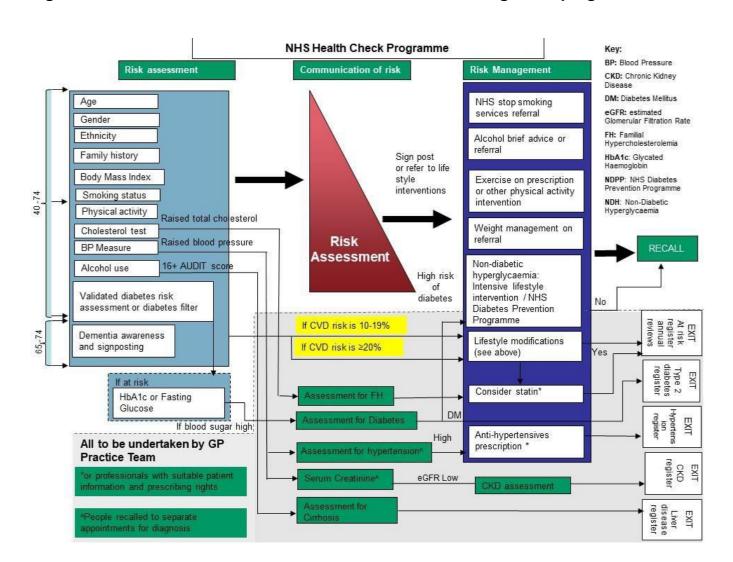


Figure 2. Overview of the vascular risk assessment and management programme

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

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

4.2 Physical activity assessment

Data required: Level of physical activity as categorised using the General Practice 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 the only validated measure for physical activity that correlates with all-cause mortality, and is advocated by NICE for use for this purpose.

While the GPPAQ asks questions about walking and activities of daily living, these are not included in the calculation, due to the significant levels of over-reporting in the amount and intensity of these physical activities during validation. Clinicians will need to use their judgement whether patients meet the minimum physical activity levels for those classified as less than active.

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. NICE guidance recommends that individuals identified as inactive who have existing health conditions or other factors that put them at increased risk of ill health should be considered for exercise referral where local services exist. Other individuals identified as inactive or only moderately active should be given brief advice on physical activity and suggested physical activity opportunities. Further guidance is included at section 4.

Additional guidance

- Moving medicine is a set of resources to support medical professionals with promoting physical activity to their patients. Faculty of Sport and Exercise Medicine, Public Health England and Sport England. 2018
- E-Learning for Health hosts a comprehensive course about the need for physical activity, including prescribing physical activity, and expert advice on Motivational Interviewing.
 Overall Programme Page (copy and paste into browser)
 https://www.e-lfh.org.uk/programmes/physical-activity-and-health

- Everybody Active, Every Day: An evidence-based approach to physical activity.
 Public Health England. 2014
- Physical Activity: UK Chief Medical Officers' Physical Activity Guidelines. 2019
- o Physical activity: exercise referral schemes. NICE public health guideline 54. 2014
- Let's Get Moving: Commissioning Guidance a physical activity care pathway.
 Department of Health. March 2012

4.3 Alcohol risk assessment

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

If the individual achieves a score of five or more on 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 full 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. AUDIT-C, FAST and full AUDIT can be self-completed by the individual or the questions can be verbally asked of the individual and their response recorded.

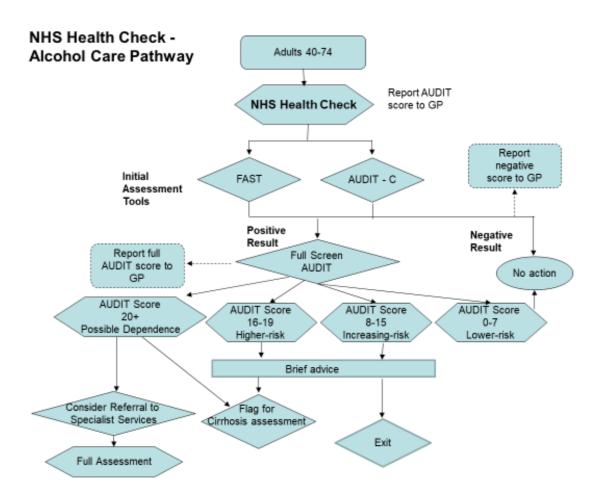
Alcohol guidelines published in January 2016 recommend that men and women should not regularly exceed 14 units per week to keep their risk of alcohol-related harm low.

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. If the individual meets or exceeds an AUDIT score of 16 (higher risk) this should be flagged with the individual's GP so that an assessment for cirrhosis can be undertaken, see section 6.7. 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 5.

Additional guidance

- Alcohol Guidelines Review Report from the Guidelines development group to the UK Chief Medical Officers. Department of Health. January 2016
- Alcohol-use disorders: prevention. NICE public health guideline 24. June 2010
- Cirrhosis in over 16s: assessment and management. NICE guideline 50. July 2016

Figure 3. Alcohol care pathway



4.4 Diabetes risk assessment

Data required: this varies depending on the validated diabetes risk assessment 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
- 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 (e.g. polycystic ovarian syndrome or severe mental health disorders)
- those on current medication known to be associated with diabetes (e.g. oral corticosteroids)

Key points: The assessment of diabetes risk should be undertaken in two stages; the first step should be to use a validated risk tool (or where that is not possible, the diabetes filter) to identify people at risk. The second step involves performing a blood test to indicate whether an individual is at risk of type 2 diabetes. A diagnosis of type 2 diabetes can only be made on the blood glucose results from a venous blood sample. Where a person has no symptoms but falls above the threshold for type 2 diabetes, a second blood test should be undertaken before a diagnosis is made, see figure 4.

As with the other tests in the check, it is important that those people who do not go on for further diabetes testing understand that everyone has some level of risk of developing diabetes. 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

Individuals who are identified as being at high risk of type 2 diabetes should receive either a fasting plasma glucose test or HbA1c, as part of an NHS Health Check. Making

arrangements for the plasma glucose test is a local authority responsibility. Figure 4 provides a diagrammatic overview of the relevant pathways.

Additional guidance

- Estimated detection rates of NDH and type 2 diabetes between validated risk assessment tools. Public Health England. 2016
- Type 2 diabetes: prevention in people at high risk. NICE public health guideline 38.July 2012, updated in 2017
- o Cirrhosis in over 16s: assessment and management. Public Health England 2016

Blood glucose testing

Key points: there is no single universally recognised blood test for high risk of diabetes, or for diabetes itself. Random (non-fasting) plasma glucose tests 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 for patients. 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:

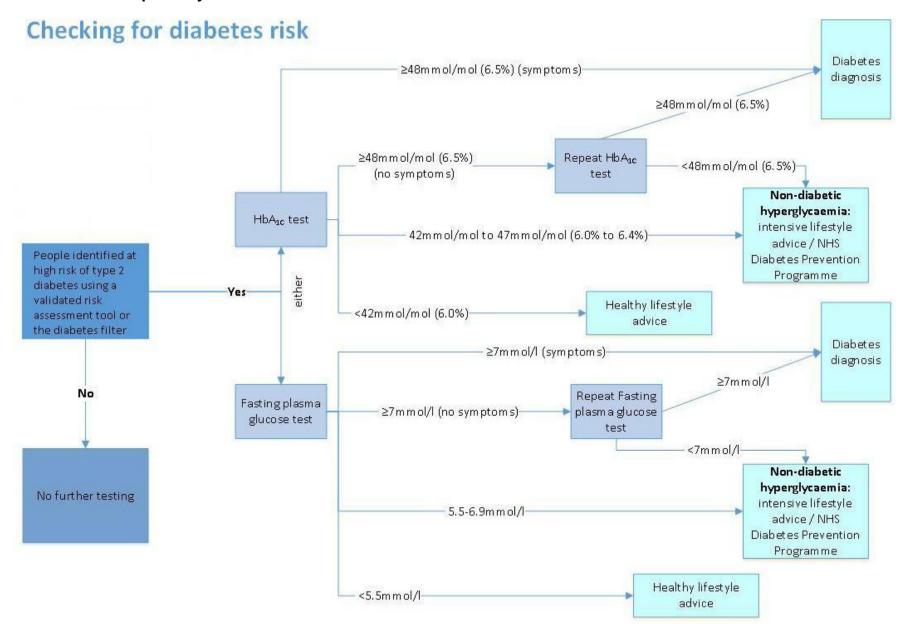
- stringent quality assurance methods are in place
- measurements are standardised
- no conditions exist which contraindicate an accurate HbA1c measurement such as haemolytic anaemia, iron-deficiency anaemia and some variant haemoglobins. HbA1c is not recommended for the diagnosis of diabetes in pregnancy 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, e.g corticosteroids, anti-psychotics
- □ acute pancreatic damage/pancreatic surgery

Figure 4. Diabetes risk pathways



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 standards¹.

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. If possible the appointment should be scheduled for no later than 11am, to make fasting easier.

Additional guidance

- Use of Glycated Haemoglobin (HbA1c) in the Diagnosis of Diabetes Mellitus.
 WHO. 2011. Abbreviated Report of a WHO Consultation.
 WHO/NMH/CHP/CPM/11.1
- 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
- NHS Health Check programme standards: a framework for quality improvement Public Health England. February 2014

4.5 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.

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

- Holt H and Freedman DB (2015) Internal quality control in Point of Care
 Testing: where is the evidence? Annals of Clinical Biochemistry. 53(2) 233-239
- James D, Ames D, Lopez B et al. (2014) External quality assessment: best practice. Journal of Clinical Pathology 67(8):651-5

- NHS Health Check programme standards: a framework for quality improvement. Public Health England. February 2014
- o 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
- Buyers' guide: Blood glucose systems. Purchasing and Supply Agency, Centre for Evidence-based Purchasing. May 2008

4.6 Raising Awareness of Risk Factors for Dementia

Key points: There are two dementia components to the NHS Health Check. Neither require any formal assessment or memory testing.

The first is that 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 35% of dementia is preventable through modifiable risk factors, including physical activity, healthy diet, reduced alcohol intake and not smoking.

The second is that people aged 65-74 should be made aware of the signs and symptoms of dementia and be signposted to memory services if this is appropriate. See sections 6.3 and 7.2 for more information on resources and training to support this element of the check.

Chapter 5. CVD risk communication and supporting behaviour change

5.0 Risk communication

To maximise benefits, everyone who has an NHS Health Check, regardless of their risk score, should be supported to understand what their risk means for them and to consider how and what changes might help them reduce their risk of ill-health. 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.

Capability, opportunity and motivation

For any change in behaviour to occur, a person must:

- Be physically and psychologically capable of performing the necessary actions.
- Have the physical and social opportunity. People may face barriers to change because of their income, ethnicity, social position or other factors.
 For example, it is more difficult to have a healthy diet in an area with many fast food outlets, no shops selling fresh food and with poor public transport links if you do not have a car.
- Be more motivated to adopt the new, rather than the old behaviour, whenever necessary.

The NICE PH49 on individual behaviour change recommends that practitioners deliver very brief advice, brief advice, or an extended brief intervention to support individual behaviour change. The intensity of support should be based on individual need. Different tools such as health coaching, motivational interviewing, cognitive behavioural therapy etc, can all be used to underpin this approach and are not mutually exclusive.

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 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.

5.1 Stop smoking interventions

NICE guidance on stop smoking interventions and services makes a number of practical recommendations about identifying smokers, offering advice on how to quit, and who this should be delivered by.

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). 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

- Stop smoking interventions and services. Nice guideline 92. March 2018 (includes provision of brief advice)
- NCSCT local stop smoking services: service and delivery guidance. NCSCT.
 2014. September 2014

5.2 Weight management interventions

Practitioners may find it helpful to follow the steps outlined in Public Health England's Let's Talk About Weight – a step by step guide to brief interventions with adults for health and care professionals found here. The guide supports health and care professionals to refer individuals to tier 2 and tier 3 weight management services for adults. It provides further information and scenarios for each of the steps outlined below:

- ASK weigh and measure the individual
- ADVISE consider referral options to local weight management services
- ASSIST depending on the outcome of the conversation, refer the individual to the weight management service, and always offer a follow up opportunity with yourself or another health care professional

Individuals can be directed to information on the importance of a balanced diet, shown in the Eatwell Guide²⁶ and if wishing to consider tips on achieving a healthier weight, can be signposted to www.nhs.uk.

Key principles of the Eatwell Guide are summarised below:

□ eat at least 5 portions of a variety of fruit and vegetables every day

NHS Health Check Best practice guidance

base meals on potatoes, bread, rice, pasta or other starchy carbohydrates;
choosing wholegrain versions where possible
have some dairy or dairy alternatives (such as soya drinks); choosing lower-fat and
lower-sugar options
eat some beans, pulses, fish, eggs, meat and other proteins (including two portions
of fish every week, one of which should be oily)
choose unsaturated oils and spreads and eat in small amounts
drink 6-8 cups/glasses of fluid a day
if consuming foods and drinks high fat, salt, or sugar have these less often and in
small amounts

The individual's alcohol intake should also be considered as part of any discussion about energy intake. The opportunity can be used to highlight links between alcohol intake and obesity, and the impact these can have on liver disease.

Additional guidance

- Obesity: identification, assessment and management of overweight and obesity in children, young people and adults. NICE guideline CG189. November 2014
- Adult obesity: applying All Our Health. Public Health England. Updated 17 June 2019.
- Weight management guidance for commissioners and providers. Public Health England: updated 17 January 2019.
- Non-alcoholic fatty liver disease: assessment and management. NICE guideline NG49. July 2016
- Preventing excess weight gain. NICE guideline NG7. March 2015
- Cardiovascular disease: risk assessment and risk reduction, including lipid modification. NICE clinical guideline 181. July 2014. Updated September 2016
- 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
- o Obesity prevention. NICE guideline CG43. December 2006. Updated March 2015

5.3 Physical activity interventions

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

- offer 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, where local services exist;

- others identified as inactive or just moderately active should be advised regarding physical activity opportunities
- ☐ follow up at appropriate intervals over a three to six-month period

PHE has worked with the Faculty of Sport and Exercise Medicine to develop Moving Medicine, an online resource to support conversations with patients, a source of posters, quick consultation techniques and shared decision-making resources.

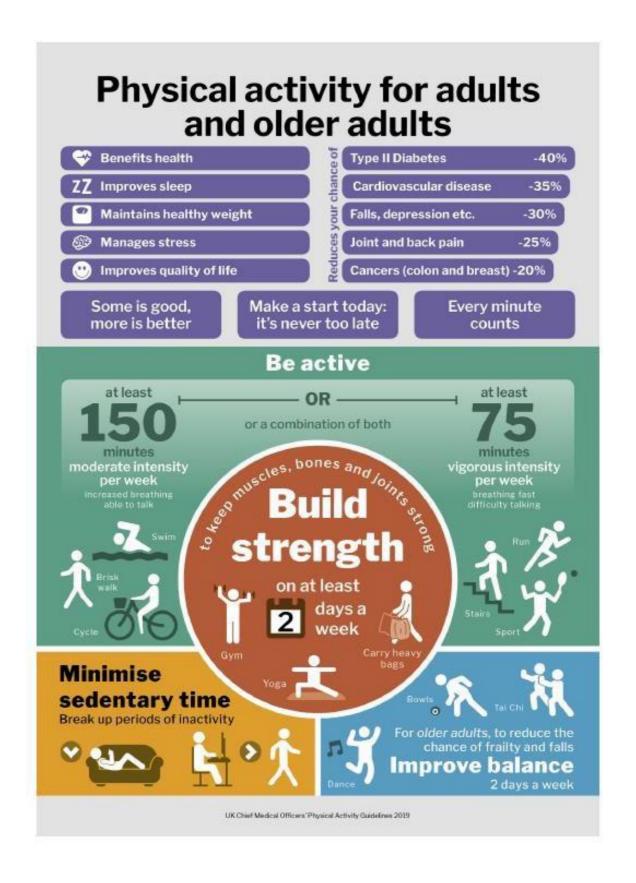
The UK Chief Medical Officers' Guidelines²⁷ recommend that all adults should aim to be active daily. Activity should add up to at least **150 minutes** of moderate intensity activity over a week. One way to approach this is to do 30 minutes at least five days a week. Alternatively, comparable benefits can be achieved through **75 minutes** of vigorous intensity activity spread across the week, or a combination of moderate and vigorous intensity activity. More is better.

In addition, adults should also do muscle **strengthening** exercises at least two days each week. Older adults also benefit from activities that develop **balance** and aid **flexibility**. It should be emphasised that **all adults** should minimise the amount of time spent being **sedentary** (sitting) for extended periods.

Additional guidance and support

- Moving medicine is a set of resources to support medical professionals with promoting physical activity to their patients. Faculty of Sport and Exercise Medicine, Public Health England and Sport England. 2018
- For those who would like to know more about the science, or about management of specific conditions such as MSK or diabetes, a free to use elearning programme is available on E-Learning for Health which includes a support video on Motivational Interviewing. Overall programme link (copy and paste into browser) https://www.e-lfh.org.uk/programmes/physical-activity-andhealth
- Everybody Active, Every Day: An evidence-based approach to physical activity.
 Public Health England. 2014
- Physical Activity: UK Chief Medical Officers' Physical Activity Guidelines 2019
- Physical activity: exercise referral schemes. NICE public health guideline 54.
 2014
- Let's Get Moving: Commissioning Guidance a physical activity care pathway.
 Department of Health. March 2012
- Physical activity benefits for adults and older adults. Department of Health, October 2015

Figure 5. Physical activity guidance for adults and older adults



5.4 Alcohol use interventions

Advice to reduce alcohol use for those drinking above low risk, an AUDIT score of 8 or above, (but who are not indicating dependence) is an essential part of helping people manage the risk alcohol poses to their health and the potential 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 low-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

The UK Chief Medical Officers recommend that men and women should not regularly drink 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. For individuals who wish to cut down the amount they drink, a good way to achieve this is to have several drink-free days each week.

Related stages of the check: see chapter 6 for guidance on managing people with an AUDIT score of 16 or above.

Additional guidance

- UK Chief Medical Officers' Low Risk Drinking Guidelines. Department of Health.
 25 August 2016.
- Alcohol Identification and Brief Advice e-Learning course
- Alcohol use screening tests (including AUDIT and FAST) and Brief Advice Leaflet.
 Public Health England June 2017.
- Alcohol Guidelines Review Report from the Guidelines development group to the UK Chief Medical Officers. Department of Health. January 2016.
- Alcohol-use disorders preventing harmful drinking. NICE Public Health Guidance 24, June 2010.
- Cirrhosis in over 16s: assessment and management. NICE Guidance 50, July 2016.

5.5 Healthier You: NHS Diabetes Prevention Programme

Key points: 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.

Healthier You: NHS Diabetes Prevention Programme offers 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.

Chapter 6. Clinical risk management

6.0 Introduction

The NHS Health Check will help identify individuals who require additional clinical assessment and follow up. This is the responsibility of primary care. Figure 6 illustrates the prevention pathway as it flows through primary care.

This section provides advice and guidance on best practice clinical follow up and further assessment that may be triggered by the NHS Health Check risk assessment. More information on Quality and Outcome framework indicators which might support this activity is in Annex D.

6.1 Managing those with high cardiovascular risk

Key points: 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
- as part of a conversation about CVD risk, all people 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

Individuals that are either prescribed a statin or have a CVD risk score ≥20% should exit on to an at risk register (Figure 2).

- Cardiovascular disease: risk assessment and reduction, including lipid management. NICE clinical guideline 181. September 2016
- Cardiovascular disease prevention optimal value pathway (Figure 5). NHS RightCare Commissioning for value products. September 2016

Figure 6. Cardiovascular disease prevention pathway

Cardiovascular Disease Prevention: Risk Detection and Management in Primary Care Cross Cutting: 1, NHS Health Check systematic detection of high BP, AF, NDH, T2DM, CKD, high cholesterol, CVD risk 2. System level action to support guideline implementation by clinicians 3. Support for patient activation, individual behaviour change and self management The Interventions Detection, CVD risk Type 2 Diabetes High BP detection AF detection and CKD detection Diabetes detection assessment. preventive and treatment anticoagulation and treatment and management intervention treatment 5 million un-85% of FH 5 million undiagnosed. 940k undiagnosed. 1.2m undiagnosed. 30% undiagnosed. The undiagnosed & most diagnosed - 40% Most do not receive 40% do not receive Many have poor BP Over half untreated people at high CVD risk **Opportunities** intervention all 8 care processes & proteinuria control poorly controlled or poorly controlled do not receive statins BP lowering Anticoagulation Behaviour change Control of BP, HbA1c Control of BP, CVD Intensive behaviour The Evidence prevents 2/3 of and statins reduce change (eg NHS DPP) and lipids improves risk and proteinuria prevents strokes strokes in AF life time risk of CVD reduces T2DM risk 30-60% CVD outcomes improves outcomes and heart attacks High CVD risk & Chronic Kidney Blood NDH Type 1 and 2 Atrial The Risk ('pre-diabetes') **Diabetes Pressure Fibrillation** Familial H/cholesterol Condition Detection and 2°/3° Prevention ncrease in CVD, acute 50% of all strokes & 5-fold increase in Marked increase in Marked increase in Marked increase heart kidnev injury & renal heart attacks, plus strokes, often of premature death and Type 2 DM and CVD attack, stroke, kidney, **Outcomes** CKD & dementia disability from CVD at an earlier age eye, nerve damage replacement greater severity

6.2 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 QRISK, 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 QRISK, 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 Hypercholesterolemia (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 for 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:
 - cardio protective diet
 - physical activity
 - combined interventions of diet and physical activity
 - weight management
 - alcohol consumption
 - smoking cessation
 - lipid modification therapy options

Additional guidance

- Cardiovascular disease: risk assessment and reduction, including lipid management.
 NICE clinical guideline CG181. September 2016
- Identification and management of familial hypercholesteroalemia. NICE clinical guideline CG71. August 2008

6.3 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.

Key points: 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

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

6.4 Assessment for chronic kidney disease (CKD)

Threshold: If the individual has a blood pressure at or above 140/90mmHg, or where the SBP or DBP exceeds 140mmHg or 90mmHg.

Key points: The individual requires further assessment to check for CKD. This is the responsibility of the GP or primary care nurse. 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).

Diagnosing CKD

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

Threshold: eGFR<60ml/min/1.73m² or ≥60ml/min/1.73m².

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/1.73m²**, 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.

- Chronic kidney disease in adults: assessment and management. NICE clinical guideline 182. January 2015.
- Cardiovascular disease: risk assessment and reduction, including lipid management.
 NICE clinical guideline 181. September 2016
- Hypertension: clinical management of primary hypertension in adults. NICE clinical guideline 127. August 2011

6.5 Identifying individuals with an irregular pulse

Key points: 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

o Atrial fibrillation: management. NICE clinical guideline 180. June 2014

6.6 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.

- Chronic kidney disease in adults: assessment and management. NICE clinical guideline 182. January 2015.
- Lipid modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline 181. July 2014
- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guideline 38. 2012
- Diabetes in adults' quality standard. NICE quality standard 6. March 2011
- Type 2 diabetes: The management of type 2 diabetes. NICE clinical guideline 87.
 May 2009

6.7 Assessment for cirrhosis

Threshold: an alcohol AUDIT score of 16 or above.

Key point: individuals indicated as drinking at higher risk levels are at elevated risk of cirrhosis and should be referred, via local care pathways, for a transient elastography (a non-invasive test to assess whether the liver has been damaged by their alcohol consumption) in line with NICE guidance. Where an individual is diagnosed with cirrhosis they should be referred to a specialist in hepatology and treated in line with NICE guidelines.

Additional guidance

Alcohol-use disorders: diagnosis, assessment and management of harmful drinking (high-risk drinking) and alcohol dependence. NICE CG115. February 2011

NICE QS11 Alcohol-use disorders: diagnosis and management.

Alcohol use disorders: diagnosis and management of physical complications. NICE CG100. April 2017

Cirrhosis in over 16s: assessment and management. NICE NG50. July 2016.

Chapter 7. Communications, marketing and branding

7.1 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, which shares the latest news on the programme, you can subscribe here.

7.2 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.

7.3 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.

Hard copies of NHS Health Check patient information leaflets and booklets will be available to order until 31 March 2020. Digital, print ready leaflets are available to download in a variety of languages on the NHS Health Check website.

Findings from recent behavioural insight research show that there are small, cost-effective changes 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.

7.4 NHS website

The NHS website provides public-facing information about what to expect from an NHS Health Check and what to do after having a check. It also includes a service directory that tells individuals where they 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

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

7.5 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, and can be found under the 'Checking' section on the One You website, which links directly to the materials on the NHS website mentioned in the section above.

Local areas may sometimes also have their own One You website, containing NHS Health Check information.

Chapter 8. Delivering a high-quality service

8.0 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

8.1 Workforce competencies

The NHS Health Check competence framework outlines the core and technical competencies required of people carrying out NHS Health Checks. The competency 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 competency framework provides a template for minimum standards when commissioning or creating training packages for people who deliver the NHS Health Check. The competencies 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.

The learner and assessor workbook guides people who are training to deliver the NHS Health Check on the learning outcomes and types of assessments required to progress towards full competency against the competency framework³. It acts as a tool to identify potential gaps in internal assessments and existing training. The workbook 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 document also describes the role of the assessor, working with the learner to review existing competencies and outline assessment principles. The NHS Health Check assessment is usually done in-house by the employing organisation, but could be carried out via a college or other programme of study.

8.2 Dementia training

Dementia training resources have been developed and can be used by NHS Health Checks trainers and practitioners to improve the quality of the dementia component of the check. The resources include training films, slide sets and factsheets. Materials can 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.

Dementia e-learning training is also available for individuals providing the NHS Health Check. It 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.

8.3 Alcohol resources

Alcohol and drug misuse prevention and treatment guidance is available online 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.

8.4 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.

8.5 Events

A national 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 9. Programme governance

9.0 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 and include:

- National Advisory Committee (NAC)
- Expert Scientific and Clinical Advisory Panel (ESCAP)
- PHE Regional and Centre Leads NHS Health Check sub-group
- Local Implementer National Forum (LINF)

9.1 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 about possible changes to the programme. You can find more information and guidance here.

Chapter 10. Quarterly data return

10.0 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 E 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. Data is published on the Fingertips NHS Health Check Profile and as three indicators on the Public Health Outcomes Framework, using an estimated eligible population (Annex F), to allow national and local comparisons.

10.1 Rolling indicator

As the first five years of delivery of the NHS Health Check by local government was completed, the indicators, in line with other public health outcome framework indicators, became year-on-year **rolling indicators**.

Previously the NHS Health Check has been described as a five-year programme. However, PHE has discovered that this has caused confusion in delivery, and will no longer be using this terminology.

10.2 Data return timetable

For Quarter 1, 2 and 3, data returns need to be submitted via the reporting tool by **midday** at least 5 weeks 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 2. Access to the data portal

Financial quarter	Q1 Apr– Jun	Q2 Jul-Sept	Q3 Oct–Dec	Q4 Jan– Mar
Portal opens on the first working day of:	July	October	January	April
Data return required on:	First week of August	First week of November	First week of February	Mid- May

10.3 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). This can be done via the data portal, found here. The nominated person must register by entering their job title, contact details, the name and email address of the DPH. An email is automatically sent to the DPH asking them to confirm access. If the DPH confirms the change, the new nominated individual will be sent their login details and password. If public health functions are shared across several local authorities, a named individual may submit data on behalf of each of them. Individual local authorities can register up to three nominated individuals.

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, ie 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 fiveyear 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. For example, if a local authority has chosen to offer checks to a wider age range i.e. 35 -74 years, then data on those people between 35 and 39 years should not be included in the data return. 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. These should include the introduction of standard codes for providers to record activity against when they deliver the service delivery.

On receipt of the data from the providing 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	f offers and/or	received NH	S Health C	Checks very	/ different fi	rom
previou	ıs data?						

EVIC	ous 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? Is the number received 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 and
- ☐ Check that the number of NHS Health Checks received opportunistically have also been counted towards the total number of offers?

	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 which 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.

10.4 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 9.3. 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 F. If an error is made during the submission process, the data can be edited through the secure data portal until the data portal closes.

10.5 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: 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 4: 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 are publicly announced in advance on the UK national statistics publication hub. Publication dates are also announced on the online portal.

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:

Α	С	D	E	F = D/C*100	G = E/C*100	H = E/D*100
Total population aged 40- 74	Eligible population (see table 3)	Number of NHS Health Checks offered	Number of NHS Health Checks received	% of NHS Health Checks offered	% of NHS Health Checks received	% Uptake of NHS Health Checks
22,413	15,494	7,000	4,000	45.18%	25.8%	57.1%

Fingertips is the unique online website displaying up to date data.

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.

Other online pages displaying the data are listed below:

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.

Annex A. Other health checks

☐ The physical health assessment for people with severe mental illness (SMI) This is an annual assessment for all adults registered in primary care as having an SMI diagnosis. It aligns with the NHS Health Check, and includes further enhancements. www.england.nhs.uk/wp-content/uploads/2018/02/improving-physical-health-care-for-smi-in-primary-care.pdf

	NHS Health Checks	SMI Checks		
Mandatory?	Yes	Yes		
Eligibility?	40-74 years, no pre-existing CVD	All patients on SMI registers		
Funding?	LA public health grant	Included in CCG baselines; requirement of standard contract (secondary care)		
Contents?	status, BMI, BP, cholesterol, CVD risk so additional measure required for SMI chec • Waist circumference, Assessment of • Assessment of illicit substance/non-p • Medicines reconciliation & review	 Assessment of illicit substance/non-prescribed drug use Medicines reconciliation & review General physical health enquiry into sexual health and oral health 		
Follow-up?	Tailored lifestyle advice & referral is part of checks, with clinical follow-up the responsibility of primary care.	In addition to tailored lifestyle advice, referral and clinical follow-up, requirement for proactive follow-up on results, personalised care planning, psychosocia support and proactive outreach to support engagement & behaviour change.		
Monitoring & reporting?	National returns: offers and checks only but with more detailed local monitoring requirements	National returns: reporting required on all elements of checks & follow-up.		

☐ The physical health check in prisons This check is offered to all prisoners aged between 35 and 74, and with a period of incarceration of two years or more.
www.healthcheck.nhs.uk/commissioners_and_providers/guidance/national_guidance1/
□ Annual health checks for people with a learning disability
These annual checks are offered to people aged 14 and above who is on their GP's
learning disability register.
www.nhs.uk/conditions/learning-disabilities/annual-health-checks/

Annex B. Relevant guidance

BMI

- Obesity: identification, assessment and management. NICE Clinical Guideline CG189. November 2014.
- 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

- Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline 181. July 2014
- Familial hypercholesterolemia: identification and management. NICE clinical guideline 71. August 2008

Systolic and diastolic blood pressure

 Hypertension: clinical management of primary hypertension in adults. NICE clinical guideline 127. August 2011

Physical activity assessment

- Everybody Active, Every Day: An evidence-based approach to physical activity.
 Public Health England. 2014
- Physical Activity: UK Chief Medical Officers' Physical Activity Guidelines.
 Department of Health and Social Care. 2019.Let's Get Moving: Commissioning Guidance a physical activity care pathway. Department of Health. March 2012.

Alcohol risk assessment

- Alcohol Guidelines Review Report from the Guidelines development group to the UK Chief Medical Officers. Department of Health. January 2016
- Alcohol-use disorders: preventing harmful drinking. NICE public health guideline 24.
 June 2010

Fasting plasma glucose (FPG)

- Public Health England (2016) Estimated detection rates of NDH and type 2 diabetes between validated risk assessment tools. Public Health England. February 2017.
- NHS Health Check programme standards: a framework for quality improvement.
 Public Health England. February, 2014
- 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

WHO. 2011. Abbreviated Report of a WHO Consultation. WHO/NMH/CHP/CPM/11.1

 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
- Stop smoking interventions and services. Nice guideline 92. March 2018

Weight management

- Non-alcoholic fatty liver disease: assessment and management. NICE guideline NG49. July 2016.
- Preventing excess weight gain. NICE guideline NG7. March 2015
- Obesity: identification, assessment and management of overweight and obesity in children, young people and adults. NICE guideline CG189. November 2014
- 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
- 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
- Everybody Active, Every Day: An evidence-based approach to physical activity.
 Public Health England. 2014
- 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
- Let's Get Moving. A physical activity care pathway Commissioning Guidance. March 2012
- Physical activity guidelines: UK Chief Medical Officers' report. September 2019

Alcohol use interventions

- UK Chief Medical Officers' Low Risk Drinking Guidelines. Department of Health. 25 August 2016.
- Alcohol Identification and Brief Advice e-Learning course
- Alcohol Identification and Brief Advice Tool. Public Health England, April 2016.
- Alcohol Guidelines Review Report from the Guidelines development group to the UK Chief Medical Officers. Department of Health. January 2016
- 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 hypercholesterolemia

 Identification and management of familial hypercholesteroalemia. NICE clinical quideline 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

- Chronic kidney disease: early identification and management of chronic kidney disease in adults in primary and secondary care. NICE clinical guideline 182. July 2014
- Lipid modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline 181. July 2014
- 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

- Lipid modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline 181. July 2014
- Chronic kidney disease in adults: assessment and management. NICE clinical quideline 182. 2014
- Preventing type 2 diabetes: risk identification and interventions for individuals at high risk. NICE public health guideline 38. 2012

- Diabetes in adults quality standard. NICE quality standard 6. March 2011
- Type 2 diabetes: The management of type 2 diabetes. NICE clinical guideline 87.
 May 2009

Annex C. NHS Health Check guidance and resources

Programme standards

• NHS Health Check programme standards - Feb 2014

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•	NHS Health Check competence framework – June 2014
	case studies
	dementia training tool
П	e-learning

Information governance and data

- 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

- 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

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 D. 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 4

Clinical area	QOF indicator	QOF ID code
Atrial	The contractor establishes and maintains a	AF001
fibrillation	register of patients with atrial fibrillation	
Hypertension	The contractor establishes and maintains a	HYP001
	register of patients with established hypertension	
	The percentage of patients with hypertension in	HYP006
	whom the last blood pressure reading (measured	
	in the preceding 12 months) is 150/90mmHg or	
	under	
Diabetes	The contractor establishes and maintains a	DM017
mellitus	register of all patients aged 17 or over with	
	diabetes mellitus, which specifies the type of	
	diabetes where a diagnosis has been confirmed	
	The percentage of patients with diabetes, on the	DM002
	register, in whom the last blood pressure reading	
	(measured in the preceding 12 months) is 150/90	
	The percentage of patients with diabetes, on the	DM003
	register, in whom the last blood pressure reading	
	(measured in the preceding 12 months) is	
	140/80mmHg or less	
	The percentage of patients with diabetes, on the	DM004
	register, whose last measured total cholesterol	
	(measured within the preceding 12 months) is	
	5mmol/l or less	
	The percentage of patients with diabetes, on the	DM007
	register, in whom the last IFCC-HbA1c is	
	59mmol/mols or less in the preceding 12 months	
	The percentage of patients with diabetes, on the	DM008
	register, in whom the last IFCC-HbA1c is	
	64mmol/mols or less in the preceding 12 months	
	The percentage of patients with diabetes, on the	DM009
	register, whom the last IFCC-HbA1c is	
	75mmol/mols or less in the preceding 12 months	
	The percentage of patients newly diagnosed with	DM014
	diabetes, on the register, in the preceding 1 April	

	COMMONIA INTERPRETATION	
	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	
Dementia	The contractor establishes and maintains a	DEM001
	register of patients diagnosed with dementia	
Mental	The percentage of patients with schizophrenia,	MH003
health	bipolar affective disorder and other psychoses	
	who have a record of blood pressure in the	
	preceding 12 months	
	The percentage of patients with schizophrenia,	MH007
	bipolar affective disorder and other psychoses	
	who have a record of alcohol consumption in the	
	preceding 12 months	
Chronic	The contractor establishes and maintains a	CKD001
kidney	register of patients aged 18 or over with CKD	
disease	stage 3 to 5	
Cardiovascul	In those patients with a new diagnosis of	CVD-
ar disease –	hypertension aged 30 or over and who have not	PP001
primary	attained the age of 75, recorded between the	
prevention	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	
Blood	The percentage of patients aged 45 or over who	BP002
pressure	have a record of blood pressure in the preceding	
-	five years	
Obesity	The contractor establishes and maintains a	OB001
_	register of patients aged 18 or over with a BMI ≥	
	30 in the preceding 12 months	
Smoking	The percentage of patients with any or any	SMOK002
	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	
	The contractor supports patients who smoke in	SMOK003
	stopping smoking by a strategy which includes	
	providing literature and offering appropriate	
	therapy	
	<i></i>	

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	SMOK004
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	SMOK005

Annex E. 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 who 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.

From April 2019, local authorities can revise themselves their previously published Q1, Q2 and Q3 data. This replaces previous protocol where local authorities had to email the national team and ask for amendments to be made. Revisions can only be made when the portal for submission of latest quarterly data is opened. Data from previous financial years **cannot** be revised. Notices detailing revisions made by local authorities are published alongside the data.

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 F: Estimating 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

_		Ineligible for NHS Health
	Age	Check due to pre-existing
Sex		conditions
Sex	group	CONDITIONS
	40-44	8.50%
	45-49	15.08%
	50-54	23.58%
Males	55-59	33.29%
	60-64	44.53%
	65-69	56.69%
	70-74	66.36%
	40-44	8.77%
	45-49	14.04%
	50-54	21.67%
Females	55-59	30.60%
	60-64	40.93%
	65-69	52.76%
	70-74	62.67%

An example of how this will be applied to a local authority population is shown in Annex G.

Since 2019/20, another adjustment has been made to remove from the estimated eligible population prisoners serving a sentence of 6 months or more.

- Those prisoners are included in ONS mid-year population estimates, however prisoners serving a sentence longer than 2 years receive checks commissioned by NHS England rather than by local authorities.
- Prisoners serving a sentence of at least 6 months but under 2 years were also excluded from the TEP because, although they aren't eligible for a NHS England check, by virtue of them being in prison they can't access a NHS Health Check provided by the local authority.

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 <a href="mailto:end-of-mailto:e

Annex G 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)1
- diabetes
- hypertension
- atrial fibrillation
- transient ischaemic attack
- hypercholesterolemia defined as familial hypercholesterolemia
- heart failure
- peripheral arterial disease
- stroke

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.
Table 5.

70

Sex	Age group	(iii) Estimated number of individuals in the age/sex group (based on latest ONS mid-year estimate)	(iv) Estimated number ineligible for NHS Health Check due to pre-existing conditions		
Male	40-44	1,878	=1,878 x 0.085 = 159.6		
	45-49	1,940	=1,940 x 0.1508 = 292.6		
	50-54	1,793	=1,793 x 0.2358 = 422.8		
	55-59	1,540	=1,540 x 0.3329 = 512.7		
	60-64	1,440	=1,440 x 0.4453 = 641.2		
	65-69	1,420	=1,420 x 0.5669 = 805.0		
	70-74	999	=999 x 0.6636 = 662.9		
	40-44	1,912	=1,912 x 0.0877 = 167.7		
	45-49	1,986	=1,986 x 0.1404 = 278.8		
	50-54	1,825	=1,825 x 0.2167 = 395.5		
Female	55-59	1,575	$=1,575 \times 0.306 = 482.0$		
	60-64	1,500	=1,500 x 0.4093 = 614.0		
	65-69	1,498	=1,498 x 0.5276 = 790.3		
	70-74	1,107	=1,107 x 0.6267 = 693.8		
TOTAL		22,413	6,919		
Estimated total eligible population = 22,413 - 6,919 = 15,494					

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