

# The NHS Health Checks programme: Implications for delivery in primary care

Nicola Walker, Elizabeth Gardiner, Melanie Davies, Kamlesh Khunti

The NHS Health Checks programme has been developed by the Department of Health (DH) in response to recommendations by the National Screening Committee. It will be offered to all adults between the ages of 40 and 74 years, and combines a full assessment of vascular risk with a personalised management plan. The proposed setting for the screening is primary care. All PCTs are expected to begin implementing and delivering the vascular checks by 2012/13 with initial pilots beginning in 2009/10 (DH, 2008a). This article describes the background to the programme and the suggested method of risk assessment. It also considers the impact on primary care, in terms of workload, access, resources, training and administration.

The NHS Health Checks programme (Department of Health [DH], 2008b) has been proposed because of the huge impact that vascular disease has had on levels of long-term illness, disability and cost to the economy. Vascular disease is a term that encompasses coronary heart disease, stroke, chronic kidney disease and diabetes. Between them, these conditions affect more than 4 million people in England, and are responsible for 36% of all deaths and 20% of hospital admissions every year (DH, 2008b).

The purpose of the NHS Health Checks programme is primary prevention, by assessing an individual's risk and advising them about lifestyle changes that could prevent progression to

vascular disease. In other cases, the early stages of disease may be identified and treated, to prevent the onset of complications.

The DH estimates that this will prevent 9500 heart attacks and strokes each year, and prevent 4000 people from developing diabetes. Furthermore, 25 000 cases of diabetes and kidney disease will be detected at an early stage, and treatment started before complications arise (DH, 2008b). This will result in significant savings for the NHS each year.

## What will the screening process involve?

Based on modelling studies of clinical and cost-effectiveness, the DH (2008b; 2008c) has suggested that systematic screening of

## Article points

1. The purpose of the NHS Health Checks programme is primary prevention, by assessing an individual's risk and advising them about lifestyle changes that could prevent progression to vascular disease.
2. The impact on access, resources, nursing and GP time will need to be assessed at practice level. Whether the PCTs will commission the programme remains to be seen.

## Key words

- NHS Health Checks
- Primary care
- Vascular screening

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### Page points

1. Screening will concentrate on the identification of factors that are known to increase an individual's risk of vascular disease.
2. It is likely that the screening will involve a "diabetes filter", which will be applied to all people participating in the programme.
3. Participants who have fasting glucose levels or HbA<sub>1c</sub> levels above an agreed limit will then be offered an oral glucose tolerance test for final diagnosis.
4. All clinical staff should have training to improve their confidence in assessing risk, communicating risk to the person, offering lifestyle advice, managing new diagnoses and dealing with any associated questions or concerns.

the entire population of England between the ages of 40 and 74 years every 5 years offers the most benefit regarding vascular risk. As yet, there is no blueprint for how best to deliver the NHS Health Checks programme. It will require significant planning by every PCT, and at individual practice level, to integrate it into the existing model of health care. The DH (2008a) has produced a diagrammatic representation of how they see the programme being adopted (*Figure 1*).

Screening will concentrate on the identification of factors that are known to increase an individual's risk of vascular disease. This will involve gathering information about age, gender, ethnicity, family history, smoking status, diet and physical activity. In addition, a healthcare professional will check blood pressure, BMI and cholesterol levels. People with raised blood pressure will be offered an extra blood test to check their kidney function, and fasting blood glucose tests will be offered to people who are at high risk of developing diabetes.

The method of screening for diabetes within the programme has not yet been finalised. It is likely that the screening will involve a "diabetes filter", which will be applied to all people participating in the programme. The filter is likely to be a diabetes risk score based on known risk factors for diabetes. Participants who score above an agreed limit on the diabetes filter will then be offered a "blood glucose test". This is likely to be either a fasting glucose measurement or an HbA<sub>1c</sub> measurement. A fasting glucose test would mean that participants would need to be tested first thing in the morning, which may be impractical; HbA<sub>1c</sub> testing has the advantage of not requiring the individual to be fasting. Participants who have fasting glucose levels or HbA<sub>1c</sub> levels above an agreed limit will then be offered an oral glucose tolerance test for final diagnosis.

The *Handbook for Vascular Risk Assessment, Risk Reduction and Risk Management* (UK National Screening Committee, 2008) suggests several ways to stratify people according to their risk, and provides information and tools to support this

process. Following assessment, the vascular risk of each individual should then be communicated in a way they understand, and advice given about relevant lifestyle changes. Those identified as being high risk or with a new diagnosis will be offered relevant management and treatment (UK National Screening Committee, 2008).

### Implications for primary care

The programme will clearly have implications for primary care, in which staff are already feeling overstretched. In recent years, primary care has increasingly taken on more responsibility, because of the general move towards favouring care in the community. The development of the Quality and Outcomes Framework (QOF), and the general shift towards patients as "consumers" means that primary care must be high quality, evidence-based and person-centred. This all requires a lot of time, commitment and work. The NHS Health Checks programme will put further pressure on primary care when surgeries are struggling to manage their existing workload, and may be of particular concern to individual practitioners who have fewer resources than larger, group practices.

The question of who will carry out the assessments and subsequent lifestyle interventions and management needs further clarification. The risk assessment process would seem ideally suited to healthcare assistants or practice nurses, who would be given a screening protocol to follow. However, they are also under pressure from an increasing workload, and may have difficulty managing the extra vascular assessments.

All clinical staff should have training to improve their confidence in assessing risk, communicating risk to the person, offering lifestyle advice, managing new diagnoses and dealing with any associated questions or concerns. Education of primary care staff will be a key agenda for PCTs.

### Effect on access to primary care

A typical list size of 5600 people would require 330 extra vascular checks per year. This would require on average five to six extra initial appointments per week (DH, 2008c). This does not take into

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1. The NHS Health Checks programme is an ambitious attempt to reduce inequality in preventative medicine.
2. The programme will undeniably improve the detection of undiagnosed vascular disease. This will require a significant increase of resources in primary care and perhaps also secondary care, as increasing numbers of people newly diagnosed with diabetes or vascular disease or both are referred.
3. Near patient testing (NPT) – blood tests performed on a capillary blood sample at time of consultation – is already being used in some pharmacies. The great advantage of NPT is that it allows the result and appropriate lifestyle advice and perhaps management, to be provided for a person in one appointment.

account additional follow-up appointments with either a doctor or nurse. It is also suggested that 20% of people screened will require a statin or antihypertensive agents, or both (DH, 2008c) which will also require ongoing follow-up for optimisation of treatment and, therefore, further demand on appointments.

The screening process is likely to increase the number of enquiries to a surgery, with patients calling for booking appointments, results and further information about different aspects of the programme. Furthermore, there will be an increased demand on room availability with additional clinics or appointments added on to existing services. This may well require a restructuring of clinics and the NHS Health Checks programme may warrant a dedicated clinic of its own. Recently, many practices across the UK have started opening for extended hours, to enhance access for the working population. There is concern that these newly created appointments may be saturated by people of working age attending for vascular screening.

The programme is an ambitious attempt to reduce inequality in preventative medicine. However, it has been reported in other current screening programmes and screening pilot studies, that response rate and diagnostic yield is lower in areas of socioeconomic deprivation and multi-ethnic populations (Banks et al, 2002; Lorant et al, 2002; Szczepura, 2005; Goyder et al, 2008). Reasons for this may involve differences in health beliefs, differences in help-seeking and information-seeking behaviour between different groups of people. To achieve equal distribution of the NHS Health Checks programme, awareness of these potential differences needs to be taken into account. Practices covering areas of deprivation or high Black and minority ethnic populations will need to make specific provisions to achieve better uptake to the programme.

**Implications for primary care resources**

The programme will undeniably improve the detection of undiagnosed vascular disease. This will require a significant increase of resources in primary care, and perhaps also

secondary care, as increasing numbers of people newly diagnosed with diabetes or vascular disease, or both, are referred. Looking further ahead, however, earlier detection should improve the management of vascular disease, thereby reducing complication rates, resulting in more favourable long-term outcomes. This should hopefully reduce admissions and referrals to secondary care.

IT systems may need updating to include templates for the programme. Current demographic data could be used to generate lists of eligible people for screening, and prompts or alerts could be placed on these individual's notes to remind clinicians to screen opportunistically.

The DH (2008a) has suggested alternative ways in which the programme could be delivered. This may include the mobilisation of new teams of primary care nurses and healthcare assistants for the sole reason of implementing vascular risk assessment and management. Commissioning of services by PCTs from organisations in the independent sector is a possibility discussed in the document Putting Prevention First (DH, 2008a).

Initial discussion and modelling costs by the DH were based on a GP practice-based system. However, other settings such as community pharmacies have proved to be useful in provision of screening programmes (Mangum et al, 2003; Hersberger et al, 2006; Liu et al, 2008) and are being considered as part of the NHS Health Checks programme. This will have implications for staff training and resources.

It will also be important to establish effective communication between community services and local GP practices, so relevant information can be shared and repetition of work avoided. Near patient testing (NPT) – blood tests performed on a capillary blood sample at time of consultation – is already being used in some pharmacies. The great advantage of NPT is that it allows the result and appropriate lifestyle advice and perhaps management, to be provided for a person in one appointment. The DH (2008a) has suggested that this could be used in the

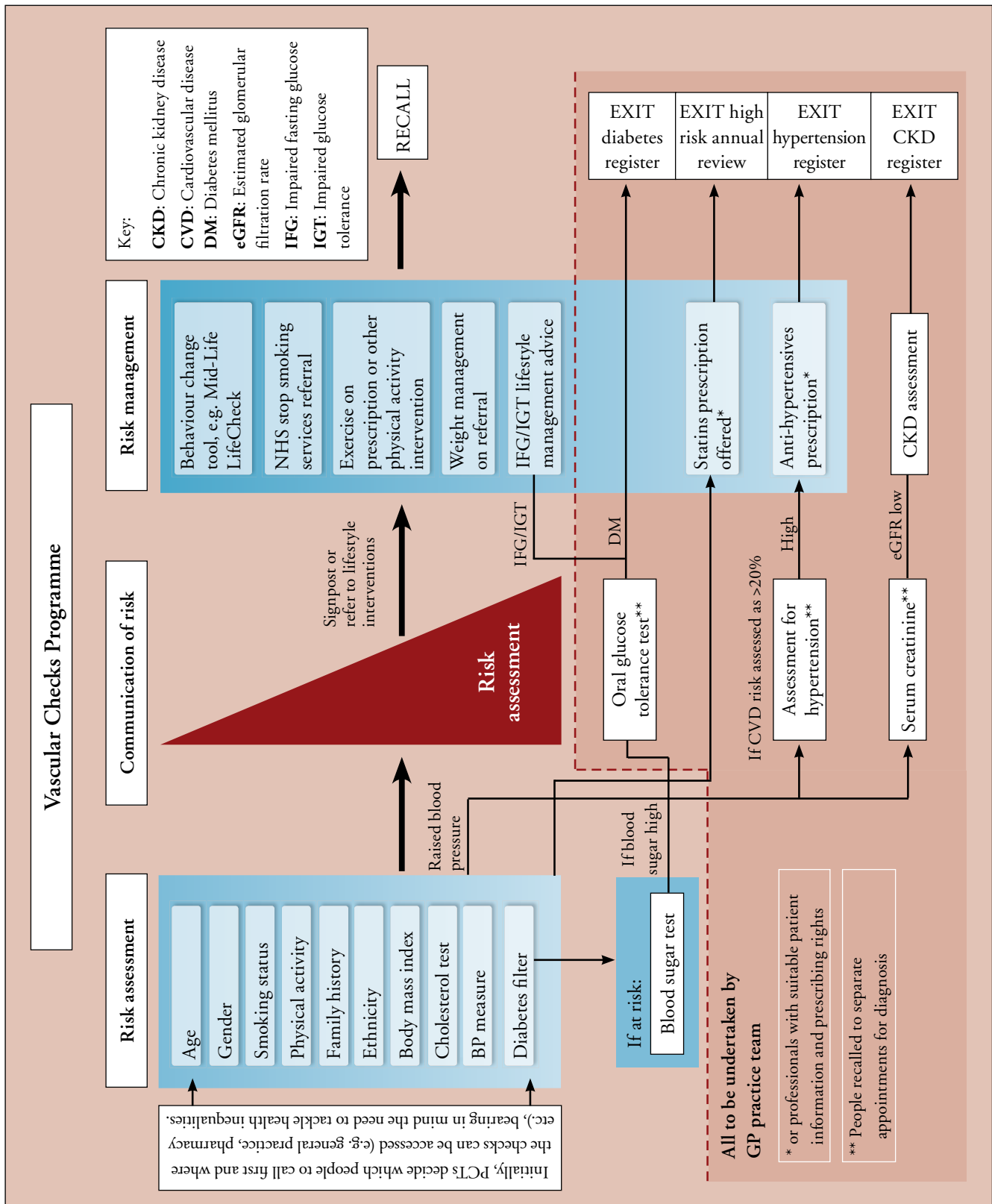


Figure 1. Diagrammatic representation of the NHS Health Checks programme (Department of Health, 2008a). Reproduced under the terms of the Click-Use licence.

**Page points**

1. From a positive perspective, successful implementation of the NHS Health Checks programme will result in several benefits for primary care.
2. Financially, practices may benefit from reduced referrals to secondary care for complications of undiagnosed vascular disease.
3. The programme could potentially be a good opportunity to improve relationships between clinical staff and patients, by involving people in their care and working together to improve their health.

programme to improve uptake and make efficient use of time and resources.

The impact on other community-based services should also be taken into consideration. There will be increased numbers of people identified as being at high risk or with a new diagnosis of vascular disease. These people will need support to change some aspects of their lifestyle that may be contributing to increased vascular risk. Services such as community dietitians, smoking resolution clinics and active lifestyle schemes may all experience increased workload because of this.

It is not clear as yet whether provision of the NHS Health Checks programme will be an indicator on the QOF and therefore attract payment. Locally, it has been indicated that services may be provided under the remit of a locally enhanced service with reimbursement on a per patient basis.

**Benefits for primary care**

From a positive perspective, successful implementation of the NHS Health Checks programme will result in several benefits for primary care. Early detection and management of vascular disease should result in a healthier and better informed population. This may actually reduce the workload for clinical staff in the long-term, as there would be fewer people requiring chronic disease management.

Financially, practices may benefit from reduced referrals to secondary care for complications of undiagnosed vascular disease. The information recorded from each screening appointment will contribute to completing some of the existing target areas in the QOF, which will save clinical staff from having to fit this into a routine appointment. This will also have a positive financial effect and provide good publicity for practices that perform well.

There is no guidance on how much funding will be provided to implement the programme. However, different PCTs are taking different approaches – some are implementing a locally enhanced service where practices are rewarded £20–25 for each health check.

The programme could potentially be a good opportunity to improve relationships between

clinical staff and patients, by involving people in their care and working together to improve their health. It could also be an opportunity for increased collaboration among different members of the primary healthcare team, and between primary care and community teams, which will improve working relationships.

**Effect on patients**

The programme will also have an impact on many of the patients who undergo assessment. Some may view the process in a positive way and welcome the chance to discuss and improve their health. All being well, they will benefit from reduced levels of chronic disease, disability, hospital admission and absence from work. Possibly others will feel more negative about the programme. This may have implications for their relationship with clinical staff, who may be viewed as too paternalistic or critical.

Previously, there has been concern that screening may provoke anxiety in some people. However, recent studies suggest this is not the case, and people tolerate the screening process without undue anxiety (Skinner et al, 2005; Eborall et al, 2007). However, before the screening programme is rolled out, it will be important to gain insight about the expectations and concerns of individuals, to help improve concordance. Many practices have a patient participation group, which would be an ideal forum for these issues to be discussed.

Diabetes UK is an organisation that represents and supports people with diabetes. In their position statement they welcome the idea of screening and early detection of diabetes and other vascular diseases, mentioning the large number of cases of diabetes that could be prevented (Diabetes UK, 2008). They identify three main areas of the programme that need further attention: a lack of public awareness about the nature of vascular disease and its risk factors, ensuring that services reach deprived areas so that health inequality is not exacerbated, and conducting further research into the optimum timing, methods and review of the screening process.



### Conclusion

The NHS Health Checks programme is an ambitious plan that offers a new approach to the delivery of a structured screening strategy, with an aim to reduce cases and complications of vascular disease in addition to reducing health inequality. It provides an opportunity for primary care to work alongside people to improve their health, and ultimately avoid much of the time involved in chronic disease management.

Systematic population screening for vascular risk has never been assessed before, so the results from pilot screening will be keenly awaited. The programme will undoubtedly increase the workload in primary care, but also offers many potential benefits.

Many issues around delivery of the programme and its impact on existing primary care services need further clarification. For successful implementation, the PCTs and practices will need to negotiate how the screening will be provided, and how much control an individual practice will have. The impact on access, resources, nursing and GP time will need to be assessed at practice level. Whether the PCTs will commission the programme remains to be seen. ■

### Conflict of interest

Professor Khunti and Professor Davies have received grants from Diabetes UK, the Department of Health and programme grants from the National Institute for Health Research to conduct research in early identification and prevention of diabetes and cardiovascular disease. They are co-authors of *The Handbook for Vascular Risk Assessment, Risk Reduction and Risk Management*.

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