NHS health checks

The NHS Health Check programme aims to help prevent heart disease, stroke, diabetes and kidney disease. Everyone between the ages of 40 and 74 years, who has not already been diagnosed with one of these conditions, will be invited (once every five years) to have a check to assess their risk of heart disease, stroke, kidney disease and diabetes and will be given support and advice to help them reduce or manage that risk.

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Everyone is at risk of developing heart disease, stroke, type 2 diabetes or chronic kidney disease as they age. But these diseases can often be prevented by lifestyle modification, and the NHS Health Check can help by assessing risk and giving personalised advice on how to reduce this risk.

In England in 2007, cardiovascular disease (CVD) led to nearly 159,000 deaths (accounting for 34% of all deaths).[1] This includes 74,185 deaths from coronary heart disease and 43,539 from stroke. An estimated 5.2 million people in the UK are living with CVD, costing £32 billion a year.[2] Heart disease, stroke, type 2 diabetes and kidney disease are the reason for one fifth of all hospital admissions.[3] Despite recent improvements, death rates in the UK from CVD are relatively high compared to other developed countries. There is also considerable variation within the UK itself—geographically, ethnically and socially.

The NHS Health Check is a national screening programme to detect individuals in the 40–74 year old age group that are at risk of developing CVD. It was launched as a strategy in January 2008 as part of a shift in focus of the NHS towards empowering patients and preventing illness. The "predict and prevent" checks or "vascular checks", as they were initially called, were designed to give people information about their health, support lifestyle changes and, in some cases, offer earlier interventions as part of a systematic and integrated programme.

Primary care trusts (PCTs) have been required since late 2009 to commission services to deliver NHS Health Checks to 40–74 year olds, on a five year, call recall, cycle. The programme is specifically designed to detect risk and is not designed to cover those who are known to have an existing cardiovascular or related condition, such as diabetes or chronic kidney disease. Individuals participating in the checks will be given an assessment of the level of their own risk of developing CVD within the next 10 years and will be offered appropriate advice and interventions. For those with the least risk, this may be a simple discussion around healthy lifestyles. For moderate risk, the recommendations may include brief interventions around smoking, physical activity or referral to lifestyle support services. Those most at risk may require clinical interventions such as a statin prescription or referral to a specialist service.

Although the introduction of NHS Health Checks started across England in 2009, full implementation of the programme will take some time. It is anticipated that the NHS Health Checks programme will be fully operational by April 2012. This means that some people may not receive their invitation for a NHS Health Check until after this date. Local PCTs will initially decide who to invite first and how they should be contacted.

Qrisk2®

A range of providers, including GP practices and pharmacies, are carrying out NHS Health Checks. Whoever the provider, the NHS Health Check should be carried out in a setting or area that allows a private conversation to take place, face to face. The Qrisk2® risk tool is the preferred tool for calculating the overall risk of developing CVD as it appears to take better account of ethnicity and deprivation.[4] However, as the Qrisk2® risk tool is currently not integrated into all GP practice clinical systems, the Framingham risk tool is also being used until such time as the Qrisk2® is more widely available.

QRISK2® is a cardiovascular disease risk calculator, based on an anonymised database UK primary care patients. Within this database a cohort of patients without evidence of diabetes mellitus or CVD was identified and followed up for at least five years, looking for the first development of CVD as an endpoint.

The tests, measurements and risk management

interventions that make up the NHS Health Check can be delivered in different settings and in different ways to suit the needs of local populations. However regardless of where the tests and measurements are carried out, they are always quality assured as part of the local commissioning PCT's service specification.

The NHS health check

The first part gathers information from the patient about family history, medication, height and weight to calculate body mass index (BMI), sex, ethnicity, age, blood pressure, and cholesterol level. The second part of the assessment involves the healthcare professional (GP, practice nurse or pharmacist) explaining the results.

All patients who undergo an NHS Health Check should have their results and assessment of the level of vascular risk conveyed to them in a way that helps them to understand and take responsibility for lifestyle change. Lifestyle advice should be discussed in a way that actively involves them in agreeing which interventions are appropriate to them. What appears to be particularly powerful is communicating the risk of developing CVD in the next 10 years to a smoker, and then calculating what that risk would be if that patient stopped smoking. PCTs are already commissioning the follow-on Stop Smoking Services required. Patients can also be shown how their level of risk can reduce if they commence taking a statin, if indicated, perhaps using patient decision aids.

The aim of lifestyle support services is to increase the importance patients attach to making health behaviour changes and also increase the confidence of patients in making health behaviour changes. Lifestyle support services also aims to signpost and increase usage of appropriate community activities and services and to encourage positive changes in health behaviour and lifestyle in terms of smoking, diet, alcohol and physical activity in clients. Lifestyle support services have demonstrated an increase in both the physiological health of individuals attending the service and the sense of well being in clients following health behaviour changes and after attending the service. There has also been demonstrated a reduction in the number of visits to GPs and practice nurses by individuals in the target groups who use this service.[5]

Patients with greater than a 20% risk should be referred to their GP to be managed and placed on their GP practice's register for CVD, diabetes, hypertension, stroke etc., as appropriate, and then followed up and managed as per normal clinical practice.

NHS Norfolk: first full year

From April 2010 to March 2011, NHS Norfolk delivered more that 30,000 NHS Health Checks, exceeding the Strategic Health Authority, NHS East of England, target by 11,000. A total of 73 GP practices, 19 pharmacies and two occupational health teams provided the health checks. More that 12,000 (40%) of the health checks were delivered in the most deprived areas of NHS Norfolk and a number of targeted programmes, developed for populations known to be a greater risk of developing CVD were carried out in Norwich, King's Lynn, Thetford and Cromer. Over 5,000 patients were established as being as high risk (>20%) of having a cardiovascular event in the next 10 years. These high risk patients were provided with primary prevention and management measures including:

- Statin therapy
- Being placed on a high risk register
- Lifestyle brief intervention
- Intensive lifestyle support/referred for intensive lifestyle support or interventions including stop smoking, exercise referral and diet and nutrition services to reduce their risk of developing CVD

Nearly one third of patients were identified as being at moderate risk (10–20%) of developing CVD in the next 10 years. As the risk has been identified early, it provides an ideal opportunity for the patient to be informed of their risk, provided with information, support and guidance on how they can manage or reduce their risk. If the support and guidance is acted upon, the possibility of those patients requiring early clinical intervention and/or developing CVD related long-term conditions decreases.

Besides identifying those patients most at risk of developing CVD, a number of assessments have led to investigation, early identification, diagnosis and treatment for a number of other conditions including; diabetes, kidney disease, impaired glucose regulation, hypertension and hypercholesterolemia.

There is very little evidence of effectiveness, if any. The NHS Health Check policy is based on a high degree of pragmatism but not much clinical evidence. The NHS has commissioned various providers to run the NHS Health Checks for their population, mainly GP practices and pharmacies. The fee for each NHS Health Check is locally negotiated but is roughly about £25 per check. The exact requirements of what must be carried out by the provider is specified in what is called an "Enhanced Service Specification" which will detail what tests have to be carried out and what equipment must be used to carry out those tests.

Conclusion

NHS Health Checks are a new way of identifying future long-term conditions in primary care, allowing early intervention to alter the likely progression of these illnesses. Within NHS Norfolk these checks have proved to be deliverable, reaching and exceeding uptake targets, and allowing those most at risk to receive care and appropriate treatment at an early stage of their illness. Those who have been identified as moderate risk have been given the opportunity to change the course of their future risks by modifying their lifestyles accordingly. Only time will tell if they manage with five yearly support to keep to their agreed lifestyle modifications and benefit from the reduced CVD risk.

Conflict of interest: none declared

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