

GP online



Telemedicine - Big savings from quick CHD diagnoses

By Dr Jonathan Lieberman, 02 June 2011

Dr Jonathan Lieberman on why consortia should commission telemedicine for cardiac symptoms.



Telemedical ECG: the handheld unit offers enhanced portability

When a patient comes into your surgery complaining of chest pains, what do you do? Carry out an in-surgery test using a conventional ECG machine and interpret the results yourself, or immediately refer the patient to hospital for an ECG?

Heart disease is one of the UK's biggest killers. It is therefore unsurprising to learn that the cost of diagnosing, treating and caring for patients with cardiac-related problems such as CHD represents the single heaviest financial burden on the NHS every year, with an estimated £34 billion spent annually on cardiac care.

The DoH is focusing on effective and efficient cardiac care, and its NSF for CHD includes national standards for improving prevention, diagnosis and treatment.

Finding a single solution that can be deployed in practices and across consortia to help reduce unnecessary cardiac referrals, cut the financial burden and deliver benefits to patients would be the ideal answer.



Dr Jonathan Lieberman: 'As GPs and consortia commission more services, it is vital to minimise unnecessary referrals, to reduce stress and generate savings'

Diagnosing the problem

Early CHD detection should lead to early action, so developing a more proactive and preventive model of care in a primary care setting would help to ease some of the financial and operational pressures on acute care providers. Patients would benefit and hospitals' resources would be freed up.

Using telemedicine, ECGs can deliver the kind of cardiac expertise found in hospitals, direct to GP surgeries. Coupled with a cardiac reporting service for expert interpretation of results, telemedical ECGs provide patients with a facility that gives an on-the-spot assessment and cuts out the waiting time for a hospital ECG.

My practice, the St Gabriels Medical Centre in Prestwich, Greater Manchester, provides care for a patient population of more than 8,500 and has been using a telemedical ECG service since 2006.

As well as on-the-spot ECGs, we can provide patients who have suspected arrhythmia with an arrhythmia wristwatch, which can record a 1-lead ECG in 40 seconds at the press of a button if they feel any symptoms of arrhythmia.



The arrhythmia wristwatch can record a 1-lead ECG in 40 seconds

The GP is sent a precise diagnosis and the NHS-accredited cardiology reporting service provides quick and expert diagnosis of chest pain symptoms from trained cardiologists. This has proved popular with patients and staff at the surgery.

Proof is in the pilot

A major two-year pilot carried out by the Greater Manchester and Cheshire Cardiac and Stroke Network revealed that a telemedical service can prevent approximately 63 per cent of referrals to secondary care if it is rolled out across the network. The pilot allowed more than 2,000 people to avoid a trip to hospital. This saved many thousands of pounds in NHS care costs and eliminated delays, stress and anxiety for patients through quicker, more convenient diagnosis.

Since deploying the telemedical ECG service at my practice, about 90 per cent of patients who have come in for a test have avoided a trip to hospital and were offered reassurance at the surgery. Without the service, these patients would have been sent directly to hospital, unnecessarily consuming NHS time and resources.

The initiative's successful outcomes mean that healthcare bodies are beginning to realise the potential benefits of telemedicine. Today, the monitoring service is in use across 10 Greater Manchester PCTs, as well as at a large number elsewhere.

Results from the pilot suggest that a nationwide deployment of a telemedical ECG service could amass an annual saving of more than £100 million.

Reaping the benefits

The telemedical ECG service has been of great benefit to St Gabriels Medical Centre. The ECG machines are handheld devices, much smaller than the traditional machines, and their enhanced portability allows clinicians to use them in several different rooms at the practice. There is also potential to use them on home visits.

Response from patients has been overwhelmingly positive.

Being able to stay within the familiar surroundings of their doctor's surgery, with people they recognise and trust, means they are more at ease. Having an ECG carried out at their local surgery also means that they do not have to spend time travelling back and forth to hospital, meaning less trouble and greatly reduced stress levels.

The prognosis

Early deployments, positive feedback from telemedicine initiatives and research data all point to the overriding benefits of the telemedicine service for patients, doctors and the NHS.

My own experiences in using a telemedical ECG service are a further testament to that.

Practice clinicians have generally been enthusiastic about telemedical ECGs and agree that they are a good diagnostic aid, which benefits patients and the NHS.

As GPs and new consortia commission more services, it is vital to minimise unnecessary referrals to secondary care, to reduce stress and anxiety for patients and to generate savings from reduced referrals. Data from pilots show how telemedicine can play a key part by bringing expert cardiac diagnosis into the primary care setting.

Prevention, it is said, is better than cure. I believe that telemedical services prevent unnecessary hospital visits and prevent a patient's serious condition from worsening by ensuring that they receive timely care.

This model of care brings the expertise of cardiologists straight to the heart of primary care and in the process, has saved the NHS a great deal of money.

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- www.stgabrielsmc.nhs.uk
- Telemedical ECG equipment and services by Broomwell HealthWatch, www.broomwellhealthwatch.com