WHEN it comes to coronary heart disease, Ireland is, unfortunately, in a league of its own. It holds the title of highest CHD death rate within the European Union in those under the age of 65. In fact, the death rate here from CHD is almost double the average EU death rate.

As a result, the Heartwatch programme can be considered one of the most significant national prevention programmes currently running in this country. Heartwatch is a secondary prevention programme based in general practice. It is the first of its kind in Ireland and is an initiative of by the Department of Health, the HSE and the Irish College of General Practitioners, in collaboration with the Irish Heart Foundation. Its overall aim is to reduce morbidity and mortality due to cardiovascular disease.

The programme began in early 2003 and involves almost 12,000 patients from around the country.

The patients included are those with a history of proven myocardial infarction (MI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA). Patients with diabetes from the HSE Midland Area’s Diabetes Structured Care Programme are also included.

As this is a general practice-based programme, the role of the practice nurse is integral to its success. In fact, according to Gráinne Nic Gabhann, an RGN and primary care project manager in the HSE Midland Area, the practice nurse has been “pivotal to the implementation of the project”.

“The practice nurse is involved with the GP in identifying suitable patients for inclusion in the programme. They undertake much of the initial assessment and routine follow-up of patients recruited. They also record all patient data on a specially developed IT system and are responsible for returning this data to an independent data centre for auditing on a monthly basis,” Ms Nic Gabhann said.

Lifestyle modifications and behavioural changes in the patients are also addressed by these nurses using motivational techniques, such as brief intervention skills.

Ongoing education to ensure that they have the additional necessary skills to manage this group of patients is provided through one-day seminars organised by Heartwatch nurse facilitators.

However according to Rita Callaly, a practice nurse in Dublin and also a member of the Heartwatch national steering committee, it is not just Heartwatch patients that benefit from this training.

“There is a direct benefit on other patients too. Take, for example, a 65 year old patient who smokes and is overweight but is not in Heartwatch. We are in a better position to deal with them. We know what questions to ask them and we can provide them with better advice because of the training we have received,” she said.

Heartwatch has the potential to prevent a high number of patients from having to return to hospital with further CHD problems or complications.

“Anything that keeps patients out of A&E is good for the population as a whole. It benefits both the patients themselves and the nurses working there,” Ms Callaly said.

How does the programme work?

Heartwatch is based around a continuing care protocol. The aim of continuing care is:

- To encourage the patient to lead as full and active a life as possible
- To record the current status of the patient in respect of the key risk factors of smoking, blood pressure, lipids, BMI and waist circumference
- To review the other lifestyle issues of diet and lifestyle
- To record the adequacy of diabetic control where appropriate
- To review current medication, compliance and the need to prescribe
- To intervene as appropriate or arrange referral for intervention by other specialists based in the practice, the hospital or the community.

In this case, the continuing care protocol for patients includes a visit to a Heartwatch clinic every three months. They are also provided with targets for the control of modifiable CHD risk factors.
Data from the patients’ visits is collected and returned to the Independent National Data Centre. Practices can use this INDC system to access demographic and clinical data relating to their own patients, as well as regional and national information collated on Heartwatch.

The benefits for those patients directly involved appears to be substantial, according to the Heartwatch report on the programme’s progress after one year, which was published in December 2004. This looked at patients who had attended four visits as part of the programme and found statistically significant improvement in the control of identifiable risk factors (see Table).

A reduction in the proportion of patients outside the target measurements set by the programme occurred in the areas of:
- Systolic and diastolic blood pressure
- Total and LDL cholesterol
- Smoking.

One of the interesting findings in relation to blood pressure control was that there seems to be a gender difference in the management and control of systolic blood pressure. This is also the case with total cholesterol. There is no marked difference between Irish males and females in relation to the number of deaths from ischaemic heart disease. Yet only 26.5% enrolled in the programme are female.

The programme identified a number of new patients with diabetes (1.8% of cohort, 177 new cases). This indicates the value in closely monitoring a high-risk population. Among previously diagnosed patients with diabetes there was an increase in the use of ACE inhibitors and angiotensin receptor blockers, which have been shown to reduce the incidence of renal complications in this group.

Other findings included:
- No significant improvements were observed in respect of BMI and waist circumference. At first visit, 76% of patients were outside targets for BMI and 92% outside targets for waist circumference
- Substantial numbers of patients had their medications changed at their first Heartwatch visit, ranging from 4% of those on aspirin to 55% of those on fibrates
- 30.9% of patients were referred to a dietician.

Structured care

“Because Heartwatch is delivered in general practice, care is delivered as near to the patient as possible. It ensures that the service is based on the criteria that define a structured care programme. This includes a holistic approach to care by a multidisciplinary team,” said Mairead Walsh, cardiovascular nurse facilitator in the HSE Midland Area.

Diabetes care

The decision to include patients from the Midlands with diabetes was important, bearing in mind the increasing number of people developing the condition in Ireland and the massive impact this is having on the health service.

Diabetes now accounts for 10% of the Irish healthcare budget, the majority of which is spent on complications that are preventable. Patients with the condition have a two- to four-fold risk of coronary heart disease, compared to people without it.

“It is recommended that even when diabetic patients are asymptomatic, their risk factors should be managed as aggressively as in non-diabetic patients with cardiovascular disease. It was agreed to include this group of patients so that their data could be compared with the cohort of cardiovascular patients when the evaluation was being carried out,” Ms Nic Gabhann said.

The December 2004 report concluded that a national programme to control the spread of heart disease in Ireland was badly needed, a fact that has not changed. According to Ms Nic Gabhann and Ms Walsh, the pilot programme has been “an educational and motivating pilot for all involved and has been well received by patients overall.”

Ms Callaly agrees. In the practice where she works, 34 patients are registered with Heartwatch.

“A huge amount of work went into getting Heartwatch up and running and it is running smoothly now. In the practice where I work, there is 100% satisfaction among the patients taking part,” she said.

According to the programme’s manager with the ICGP, John Leahy, an in-depth analysis of Heartwatch has been taken place for some time now, the results of which are expected imminently.

Meanwhile the final Heartwatch report, which is currently with the Department of Health, “is anxiously awaited by all participants,” Ms Nic Gabhann said.

“This report will inevitably determine whether or not and in which manner this programme will be rolled out in the future. As with all pilots, much learning has ensued and some aspects of the programme may need to be revisited.”