Ireland's Changing Heart

Second Report on Implementation of the Cardiovascular Health Strategy

Prepared by the Heart Health Task Force

March 2003

Foreword

I am delighted to note the substantial achievements in implementing the Cardiovascular Health Strategy, as set out in this second report by the Heart Health Task Force. Heart disease remains the single biggest killer in Ireland. Living with heart disease is an everyday reality for thousands of Irish people and their families. That is why in July 1999 the Government launched a blueprint - *Building Healthier Hearts* - to address this important cause of sickness and death.

Since the launch of the Cardiovascular Health Strategy to the end of September 2002 the Government has allocated an additional €45 million to fund the implementation of its recommendations. €9 million additional funding has been allocated in 2003.

The first progress report published in November 2001 clearly set out that a lot had been achieved but it was equally evident that a lot more needed to be done. The initial developments and achievements in implementing the Strategy provided a foundation for continued expansion. A wide range of new and higher quality services are now available, including increased health promotion and disease prevention, better response times in the pre-hospital setting, shorter waiting times for diagnostic examinations and treatments, as well as considerable expansion of cardiac rehabilitation services throughout the country.

The title of this second report, *Ireland's Changing Heart*, captures the sense of progress towards improving the heart health of the population. Nurturing the resource that is the health of our population and equality of access to health services delivered to a high quality and with accountability are the basic principles of the National Health Strategy *Quality and Fairness.* Ongoing implementation of the Cardiovascular Health Strategy will continue to be guided by these principles.

Ireland's Changing Heart provides a basis for more detailed study of specific challenges ahead in the implementation of the Cardiovascular Health Strategy. The report sets out the changing epidemiology of coronary heart disease in Ireland, with decreasing death rates, longer survival and increased need for acute services and for ongoing health care.

Inequalities in death rates from cardiovascular disease, with substantially higher rates in those with the lowest levels of education and material resources, present major challenges to us as a society. Other challenges include the continued expansion of health service infrastructure, and the education and training of skilled staff across a range of disciplines. The development of new and improved evidence-based treatments and interventions to improve outcome and quality of life for patients with coronary heart disease is welcome but has major implications for health service funding.

I would like to thank the Heart Health Task Force, under the chairmanship of Dr. John Bowman, for its commitment to giving overall direction and impetus to the implementation and review of the Cardiovascular Health Strategy. I would also like to thank the Advisory Forum on Cardiovascular Health, chaired by Dr. Jane Wilde, and the members of other national and regional committees. These committees have ensured that momentum is maintained in service development and have supported the review of progress in implementing the recommendations of the Cardiovascular Health Strategy Group.

The Government will do everything within its resources to ensure that this momentum is maintained to address the challenges ahead and to achieve comprehensive implementation of the Cardiovascular Health Strategy.

Micheál Martin T.D.
Minister for Health and Children

Message from the Chairman

I am pleased, on behalf of the Heart Health Task Force, to introduce this second report on the implementation of the Cardiovascular Health Strategy - *Building Healthier Hearts*. This report, *Ireland's Changing Heart,* describes progress since the launch of the Strategy in July 1999 up to the end of September 2002.

There have been considerable achievements since 1999 in the prevention, detection and treatment of cardiovascular disease. Progress has been achieved across the country, in health promotion and across the range of health services, in a cohesive and effective manner. This can be attributed directly to the quality of the template provided in the Strategy, the many structures established to oversee its implementation, the additional resources provided and the dedication of all involved in its delivery.

As Chair of the Heart Health Task Force, I would like to pay tribute to the members of the Task Force for their time, expertise and dedication to implementing the Strategy. In particular, I would like to commend them for their efforts in beginning to address the intersectoral actions necessary for heart health in Ireland. I would like to thank Dr. Jane Wilde, Chair of the Advisory Forum on Cardiovascular Health and the members of the Forum for professional and technical advice on the Strategy's implementation. The Task Force would also like to note its considerable indebtedness to the Secretariat and to Mr. Chris Fitzgerald, Principal Officer at the Department of Health and Children and Dr. Emer Shelley, National Heart Health Advisor. The success achieved to date would not have been possible without the input of all concerned.

Recognition must also be given to the many people who are represented on the regional structures of the health boards for their management of the implementation process at regional level.

This Report, *Ireland's Changing Heart*, is being submitted to the Joint Oireachtas Committee on Health and Children as required under the terms of reference of the Heart Health Task Force.

Dr. John Bowman
Chair, Heart Health Task Force

Executive Summary

Chapter 1

Introduction

In accordance with its terms of reference, the Heart Health Task Force submits its second report on implementation of the Cardiovascular Health Strategy to the Joint Oireachtas Committee on Health and Children. This progress report is in accordance with Target 13 of the National Health Strategy *Quality and Fairness*.

The aim of *Ireland's Changing Heart* is to review the implementation of the Cardiovascular Health Strategy from its launch in July 1999 up to September 2002.

Specific objectives for this report are to:

- review recent trends in the epidemiology of cardiovascular disease in Ireland,
- provide information on the Cardiovascular Health Strategy and on the structures established to implement it,
- describe progress to date in the range of activities and service settings addressed in the Strategy, namely health promotion, primary care, pre-hospital care, hospital services and cardiac rehabilitation, as well as in information systems, audit and evaluation,
- set out financial allocations, with analysis of posts funded and initiatives undertaken, and
- consider future challenges in implementing the Strategy.

This report does not purport to be a full account of all service developments throughout the country but rather to provide an overview and description of the services that have been developed as a result of implementing the Cardiovascular Health Strategy. A summary of progress by recommendation is attached at **Appendix A.** This report was compiled from submissions using a standardised template by all organisations with responsibility for implementing the Strategy.

Chapter 2

Epidemiology of Cardiovascular Diseases in Ireland

Introduction

There have been important changes in death and sickness rates from cardiovascular diseases in Ireland in recent years. While death rates from coronary heart disease (CHD) and stroke have decreased, the number of people living with chronic cardiovascular disease has increased.

Trends in Cardiovascular Mortality

In 1980, 51% of all deaths in Ireland were attributed to the circulatory diseases (CHD, stroke and diseases of other blood vessels). This decreased to 41% of deaths in 2000.

Total age-standardised mortality rates from all causes at all ages are decreasing in Irish men and women. Much of the decrease in total mortality can be attributed to continuing reductions in mortality from CHD. The decline in CHD death rates has been particularly striking in the under-65s and has narrowed the gap between mortality in Irish men and women and the EU average. Reductions in mortality have occurred also at older ages. Ireland continues to have high death rates from CHD in the under-65 age group compared to other EU countries.

Hospital Discharges

Hospital discharges with a diagnosis of CHD increased between 1996 and 2001 in all age groups, in men and in women. The average length of hospital stay decreased from 7.9 to 6.9 days but the increased number of cases meant that there was an overall increase in total bed days. The in-hospital mortality rate decreased from 5.9% to 3.7%, with reductions seen in all age groups, in men and in women.

Hospital discharge data point to a changing pattern of presentation of acute coronary disease. A decreasing proportion of patients with a diagnosis of acute coronary syndrome is discharged with a diagnosis of acute myocardial infarction. An increasing proportion of patients with symptoms suggestive of heart attack have a diagnosis of acute coronary syndrome.

Since the publication of the Report of the Cardiovascular Health Strategy Group there has been a substantial increase in the number of patients undergoing coronary arteriography in hospitals reporting to HIPE. Overall, the number of investigations increased from 5 216 to 7 974 between 1996 and 2001.

There has also been a substantial increase in angioplasty procedures, from 939 in 1996 to 2 800 in 2001. The number of surgical operations for CHD increased from 1 025 in 1996 to 1 429 in 2001.

Cerebrovascular Disease (Stroke)

Death rates from stroke continue to decrease in Irish men and women. Death rates from stroke for Irish men under the age of 65 are very similar to the EU average, though tending to be slightly higher than the EU average in Irish women. There was a substantial increase in the number of hospital bed days in patients with a discharge diagnosis of stroke, from 236 683 days in 1996 to 276 173 days in 2001.

Prescriptions

There is evidence from Ireland as well as from other countries that in the past a substantial proportion of people were not receiving evidence-based medications. Between 1997 and 2001 there was a 47% increase in the frequency of prescriptions for cardiovascular disease for people covered by the General Medical Services (GMS) (Payments) Board. Some of the increase was in treatments for raised blood pressure and raised blood cholesterol and some was in treatments used to reduce risk of recurrent events. Some of the increase in prescriptions in the GMS reflects the increase in the number of people living into older age and the increase in the numbers identified with chronic heart failure.

Risk of Cardiovascular Disease

Information from the Revenue Commissioners shows that the number of cigarettes retained for use in Ireland has increased in recent years. Information from other sources indicates that there have been improvements in other risk factors for CHD, such as blood pressure and blood cholesterol levels.

Breakdown of additional posts funded under the Cardiovascular Health Strategy, 2000 to 2002, Whole Time Equivalents (WTEs)				
Health Sector	**2000**	**2001**	**2002**	**Total**
Health Promotion	70.5	64.5	4	139
Primary Care and pre- Hospital	37	42	34	113
Hospitals	117	156	55	328
Cardiac Rehabilitation	36	63.5	9.5	109
Audit / research	31.5	44	5.5	81
Total	**292**	**370**	**108**	**770**

While CHD mortality has decreased at all ages we continue to have high mortality rates when compared to other developed countries. It is of particular concern that the decrease in cardiovascular mortality has been unequal in different social groups.

Chapter 3
Background, Structures and Funding

The Cardiovascular Health Strategy - Building Healthier Hearts

An Taoiseach, Mr. Bertie Ahern T.D., launched the report of the Cardiovascular Health Strategy Group, *Building Healthier Hearts*, in July 1999. The overall aim of the strategy is to improve the heart health status of the population by focussing on the following four areas:

- reducing the risk factor profile in the general population,
- detecting those at high risk,
- dealing effectively with those who have clinical disease, and
- ensuring the best survival and quality of life outcome for those who recover from an acute attack.

Implementation of the Strategy's 211 evidence-based recommendations will result in substantial development and enhancement of a wide range of health services, including health promotion, primary care, pre-hospital care, hospital services and cardiac rehabilitation, and in information systems, audit and evaluation.

Structures for Implementing the Cardiovascular Health Strategy

As a measure of the Government's commitment to the Report of the Cardiovascular Health Strategy Group, the following structures were put in place at national, regional and local level to support its implementation:

- Heart Health Task Force,
- Advisory Forum on Cardiovascular Health,
- Joint Working Group to Review Consultant Cardiology Manpower Requirements,
- National Steering Committee for the Initial Implementation Phase of a National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease,
- National Cardiovascular Information Systems Steering Committee,
- Interdivisional Working Group on Cardiovascular Health within the Department of Health and Children, and
- Regional cardiovascular health steering / implementation committees at health board / Authority level.

The terms of reference and membership for these committees are set out at **Appendix B.** Prioritisation of the Strategy recommendations was an important early task completed by the Advisory Forum on Cardiovascular Health.

Funding and Posts

To September 2002 the Government allocated a total sum of €45m towards the implementation of the Cardiovascular Health Strategy. A further €9m was allocated in 2003.

In addition €4.2m has been allocated through the GMS

(Payments) Board for the provision of nicotine replacement therapy to people in the General Medical Services scheme. The National Development Plan is providing some additional funding for capital projects being undertaken by health boards as part of the implementation of the Strategy. **Appendix C** contains details of national initiatives and allocations to health Authority / boards for 2000, 2001 and 2002.

In 2000, 2001 and 2002 the Cardiovascular Health Strategy funding supported a wide range of initiatives and a total of 770 additional posts were funded summarised in the above table and the details are set out in **Appendix C.**

Chapter 4
Health Promotion

Introduction

There are 58 recommendations on health promotion. Health promotion was targeted for funding at the beginning of the implementation process and the resources of regional health promotion departments were substantially increased. In the first three years an additional 139 health promotion staff were employed.

Ireland needs a Change of Heart

A mass media campaign *Ireland needs a Change of Heart* was developed to address the entire community:

- to raise public awareness of the comparatively high rates of heart disease in Ireland and of the lifestyle factors which increase the risk of cardiovascular disease, i.e. smoking, diet and raised blood cholesterol, raised blood pressure and physical inactivity, and
- to raise public awareness of a national five-year programme to reduce the incidence of heart disease in Ireland.

Phase one, launched on 20 September 2000, was the six week launch phase and involved producing and placing advertising on television and radio as well as outdoor posters. A 16 page *Handy Guide to a Healthy Heart* was produced and distributed to every household in the country during October / November 2000. Health boards and health service providers played an important role in supporting the national campaign.

It was agreed that phase two of *Ireland needs a Change of Heart* should concentrate on physical activity in collaboration with the Health Promotion Agency of Northern Ireland. This phase of the campaign called *get a life, get active* was formally launched in Dublin on 23 May 2001 by the two Ministers, Mr. Micheál Martin, T.D., Minister for Health and Children, in the Republic and Ms. Bairbre de Brún, M.L.A., Minister of Health, Social Services and Public Safety, in Northern Ireland. In 2002 the programme placed particular emphasis on walking. Research on both campaigns highlights a 50% recall of *get a life, get active* and 40% recall of *Ireland needs a Change of Heart*.

Smoking

The Cardiovascular Health Strategy recognises that a multi-faceted approach is needed to reduce the prevalence of smoking, including fiscal, legislative and education measures.

€1.30 increase in the price of cigarettes since 1999 is as a result of an increase in the Government levy. On 27 March 2002 the President signed the Public Health (Tobacco) Act, 2002. Compared to previous legislation, the Act provides a more comprehensive and strengthened legislative basis for regulating and controlling the sale, marketing and smoking of tobacco products and for enforcing such controls.

The Heart Health Task Force recognised the widespread concern about smoking by teenage girls and young women. *NICO*, a special component of the national *Break the Habit* anti-smoking campaign targeted teenage girls in 2000, is partly funded by the Strategy. Each health board has established a smoking action group to co-ordinate tobacco health promotion. All boards have expanded their tobacco health promotion services and twenty-six additional community smoking cessation officers have been recruited in the first three years of the Cardiovascular Health Strategy.

Diet and Nutrition

Since 1999 the focus of the National Healthy Eating Campaign has been on reducing fat intake and the consumption of more fruit and vegetables, key healthy eating messages for the prevention of cardiovascular

disease. Research indicates a 60% awareness of the campaign and 30% of those who were aware were influenced to change their eating habits.

Thirty-six additional community dietitians have been recruited. These have formed partnerships with community groups to provide nutrition education, cookery programmes and healthy eating projects. The community dietetic services provide advice and counselling to people who are overweight or obese. These services have increasing linkages with general practice as well as with public health nurses and other community based health professionals.

Physical Activity

Some key developments since the launch of the Strategy include:

- Through the implementation of the Irish Sports Council's Strategy *A New Era for Sport*, twelve local sports partnerships were established around the country, involving a wide variety of agencies from the statutory, voluntary and sporting sectors, including health boards.
- Arising from the successful piloting of GP Exercise Referral in the Southern Health Board and the Mid-Western Health Board, *a National Framework for Developing General Practice Exercise Referral in Ireland* was agreed.
- Health boards have appointed twelve physical activity co-ordinators and structures have been put in place to provide advice and support in a number of settings, including schools, workplaces and communities, targeting in particular the young and older people.

Alcohol

Since the publication of the National Alcohol Policy (1996) policy, several programmes have been expanded or developed including a three-year alcohol awareness campaign (2000-2003) *LESS IS MORE,* training programmes for professionals, greater enforcement of drink driving laws and research to estimate the economic costs of alcohol problems. The Strategic Task Force on Alcohol was set up in January 2002 by the Minister of Health and Children and has published an interim report.

Workplace

Health promotion in the workplace has expanded considerably in recent years and a workplace co-ordinator has now been appointed in all health boards, in the main from Cardiovascular Health Strategy funding. Workplace health promotion has taken place across both health and non-health care settings, including through the Irish Heart Foundation's *Happy Heart at Work* initiative.

Most health boards and the Department of Health and Children have implemented a number of programmes and initiatives for staff health promotion. These aim to promote a workplace environment which 'makes the healthier choice the easier choice', to improve health behaviour in the workforce and, overall, to support physical and mental health and well-being in health service staff.

Hospitals

The Irish National Health Promoting Hospitals (HPH) network has grown to include 64 hospitals. The HPH network established two initiatives under the Cardiovascular Health Strategy, the National Hospital Survey, and the Pilot Health Promoting Hospitals Co-ordination Project.

Schools

Since the publication of the Strategy in 1999, there have been substantial developments with the introduction and implementation of social and personal health education (SPHE) within the school curriculum. By September 2003, all post-primary schools should be providing SPHE at Junior Cycle level. The National Council for Curriculum Assessment are currently developing the Senior Cycle curriculum. The aim is that the post-primary curriculum will build on the primary level curriculum.

Targeting Disadvantage

Given the evidence that people from disadvantaged areas are most at risk of disease, including heart disease, targeting people living in these areas is a priority for health promotion. The Department of Social, Community and Family Affairs recognises the strong links between poverty

and ill-health generally. It has identified a number of programmes under its remit that have the potential to support the implementation of Cardiovascular Health Strategy recommendations.

The Irish Sports Council is leading a partnership programme to promote physical activity in disadvantaged areas. The Designated Area Scheme is a partnership between the Irish Sports Council and the three largest sports governing bodies, the Football Association of Ireland, the Gaelic Athletic Association and the Irish Rugby Football Union.

Chapter 5
Primary Care

The Cardiovascular Health Strategy Group made 55 recommendations on primary care.

Heartwatch

Following considerable discussion by key stakeholders a protocol was agreed for a secondary prevention programme in general practice. Commenced on 1 October 2002, *Heartwatch* aims to implement and evaluate the first phase of a structured programme of secondary prevention of cardiovascular disease in general practice in Ireland. During the initial phase of *Heartwatch* about 14 000 patients (GMS and private) with a history of the following will be treated by approximately 440 GPs:

- proven myocardial infarction,
- coronary artery bypass graft, or
- percutaneous transluminal coronary angioplasty or percutaneous coronary intervention.

Diabetic patients from the Midland Health Board's Diabetic Structured Care Programme are also being included under the *Heartwatch* programme. Eligible patients will be invited to attend the practice four times in the first year to assess and review lifestyle factors. In addition to reducing risk of a further coronary event, it is expected that the programme will be associated with reduced symptoms and improved quality of life for patients and their families.

A National Steering Committee has been established to oversee the initial implementation of the programme (see **Appendix B**). The National Steering Committee will commission an independent evaluation of *Heartwatch* at the end of the first year of patient care to determine the continuation and any expansion of the programme. In accordance with the agreed protocol, a National Programme Centre and Independent Data Centre have been established.

Nicotine Replacement Therapy

The Minister for Health and Children announced the introduction of NRT for GMS patients from April 2001. To the end of October 2002, 115 000 GMS NRT prescriptions had been filled at a cost of €4.2m.

Community Health Promotion

Sixteen community dietitians have been employed to provide services in the community and in general practice. Smoking cessation clinics have been developed in community settings and referral protocols have been established in several health boards. With the *Heartwatch* programme, linkages will be strengthened between GPs, other community based professionals and health promotion staff.

Several health boards have provided training for GPs and PHNs on supporting behaviour change for heart healthy lifestyles. Many boards have introduced the *Being-Well* programme. It focuses on the importance of individual choice and personal skills, group support, healthy environments and community based responses in enabling individuals to maintain healthy choices.

Other Initiatives

Initiatives have developed to strengthen linkages between hospitals and general practice. *The Reduction of Heart Attack and Stroke through Prevention* pilot study was funded by the Cardiovascular Health Strategy in 2002 and 2003. It aims to determine the feasibility of sharing information on patients' risk status between the hospital and general practice settings. The findings from this pilot study will be considered in the context of the evaluation of the *Heartwatch* programme.

Chapter 6

Pre-hospital Care

The Cardiovascular Health Strategy contains 18 recommendations on pre-hospital care.

National Initiatives

On 10 May 2000 the National Ambulance Advisory Council was replaced, on a statutory basis, by the Pre-Hospital Emergency Care Council (PHECC). The Council is an independent statutory agency with responsibilities for developing professional and performance standards for ambulance services and personnel. The Council has adopted a set of Standard Operational Procedures for the ambulance service, which includes the administration of aspirin and emergency cardiac drugs.

In relation to the administration of cardiac drugs by emergency medical technicians (EMTs), the Department of Health and Children plans to introduce an EMT-Advanced post from March 2003.

Regional Initiatives

Training of staff is ongoing in the ambulance services in line with the PHECC's Standard Operational Procedures. Immediate care training has also been provided for hospital staff as well as to community based staff, including GPs and practice nurses.

All ambulances are now equipped with defibrillators and the majority of staff has received appropriate training in the area. The upgrading of equipment has improved the call to needle time for patients as well as other service developments including the provision of 12 lead ECG telemetry by a number of health boards.

A total of six community resuscitation training officers were recruited by health boards, improving the resuscitation skills of staff working in the community such as PHNs. Many boards developed programmes to train first responders, either professionals or members of the public in first responder skills. Many boards have purchased defibrillators for use by GPs.

Chapter 7

Hospital Services

The Cardiovascular Health Strategy has 46 recommendations in relation to acute hospital services.

Planning Consultant Cardiology Services

At the start of 2002, Ireland had 29 consultant cardiologists, the lowest per capita rate in the EU. Based on advice from the Advisory Forum on Cardiovascular Health, the Department of Health and Children established a Joint Working Group to Review Consultant Cardiology Requirements in line with *Building Healthier Hearts* (see **Appendix B**).

In May 2001, the Joint Working Group submitted an interim report identifying 25 priority consultant cardiology posts spread across all health boards and in different types of hospitals - acute, regional and tertiary. With the resources available in 2002 and 2003, funding has been allocated for the appointment of 17 additional consultant cardiologists and has allowed for an increase in consultant staffing in each region. The final report from the Joint Working Group is due in the first half of 2003.

Diagnostic and Treatment Services

i. Non-invasive Diagnostic Tests

With the implementation of the Strategy there has been substantial expansion of non-invasive specialised cardiac investigation services. Most health boards are now self-sufficient in the range of non-invasive diagnostic tests. 81 additional cardiac technicians were employed. This has enabled greatly improved access to diagnostic services, including electrocardiography, stress testing, holter monitoring, 24 hour blood pressure monitoring, pacemaker checks, event monitoring and transoesophegal echocardiography.

ii. Cardiology Procedures

Nationally, the waiting list for cardiology procedures has fallen by 24% from 1 102 in June 1999 to 841 in June 2002, which is in line with the national reduction in overall waiting lists during the same period. The waiting lists for cardiac surgery have fallen more markedly in the same time period, by 75% from 1 106 to 273. The number of invasive

procedures has increased substantially since 1996 (see table), and as set out in Chapter 2.

Procedure	1996 (no.)	2001 (no.)	% increase
Angiography	5 219	7 974	53
PTCA	939	2 800	198

A mobile cardiac catheterisation service is provided in Sligo General Hospital for patients in the catchment area. This service is an important development for the region with over 600 patients in receipt of the service up to September 2002. Waiting times are reduced with patients being offered an appointment within two weeks.

Along with the introduction of the coronary angiography service in Sligo General, a tele-cardiology service with St. James's Hospital commenced in 2003 as a joint service development between the two health care providers, CResT Directorate, St. James's Hospital, Dublin and Sligo General Hospital. Coronary angiography patient data are electronically transmitted to St. James's Hospital. Both sites can view simultaneously and discuss the images.

Coronary Care Units

An additional 127 CCU nurses and other specialist nursing staff have been employed, supporting increased activity levels in CCUs, and enabling enhanced quality of care, through increasing time for communication and patient education, and for staff training. The equipment of many CCUs has been upgraded with Strategy funds and the number of CCU beds has been increased.

A national census was carried out of patients admitted with an AMI in 1992 and repeated in 1994. With a research grant from Strategy funds a census of patients presenting with a suspected acute coronary syndrome is being carried out in the Spring of 2003.

Chest Pain Services

i. Chest Pain Assessment Units

The main functions of a chest pain assessment service attached to the emergency department are to facilitate early identification of patients with acute myocardial infarction or other acute coronary syndromes, and prevent inappropriate discharge. A chest pain assessment service opened at St. James's Hospital in September 2001. Initial findings include that 85% of patients are discharged without needing to be admitted to the cardiology service.

ii. Chest Pain Clinics

Another model of chest pain service is provided to fast-track patients when the GP does not consider that immediate admission is required but that the symptoms warrant diagnosis and consultant opinion sooner than would be provided through a standard out-patient appointment. In the Southern Health Board, a chest pain clinic was opened at Cork University Hospital in September 2002. This service provides a structured link between the primary care and hospital settings and allows for rapid diagnosis of angina, enabling further diagnostic tests and treatment as appropriate.

Heart Failure Management

With the implementation of the Strategy, a number of health boards, including the South Eastern, North Western, Midland and Mid-Western and the Eastern Regional Health Authority have employed specialist nurses and are providing a heart failure service. Fifty professionals involved in the care of patients with heart failure have received training with Strategy funding.

Resuscitation Training

Health boards have recruited 21 additional hospital based resuscitation training officers. These provide training in line with accepted standards and best practice. As a result of these appointments and the purchase of necessary equipment in most hospitals throughout the country, hospital staff receive resuscitation training on an ongoing basis to international standards.

Chapter 8
Cardiac Rehabilitation

There are 10 recommendations on cardiac rehabilitation in the Cardiovascular Health Strategy.

Cardiac rehabilitation benefits patients by:

- slowing, stopping or reversing the progression of their underlying cardiac diseases,
- reducing their risk of further cardiac events, and
- enhancing their quality of life by restoring self confidence, removing deconditioning effects of illnesses and promoting healthy levels of exercise.

Phase I (in-hospital) and Phase II cardiac rehabilitation (early post-discharge) is now provided in most hospitals that treat patients with heart disease. Phase III is available in 29 hospitals, compared to 12 in 1998 and Phase IV is being developed in a small number of centres. Programmes are multidisciplinary and the appointment of additional consultant cardiologists (Chapter 7, section 7.2i) will ensure that in the future they are all consultant led.

Minor capital funding from the Strategy allowed many hospitals acquire extra space to facilitate the introduction or expansion of a cardiac rehabilitation service and to provide or replace equipment to support the expansion of services.

One of the indirect benefits from cardiac rehabilitation is the number of support groups that have been formed by patients after the cardiac rehabilitation programme finishes. These groups continue to have access to cardiac rehabilitation multidisciplinary teams.

The Health Services Employers Agency is considering the appropriate career structure for cardiac rehabilitation co-ordinators. Research has been funded under the Strategy to achieve a national consensus on the use and format of a cardiac rehabilitation audit system for Ireland.

Chapter 9
Information Systems, Audit and Research

Planning for Audit and Clinical Governance

The necessary links between the components of the audit cycle have been kept in mind in implementing the Cardiovascular Health Strategy recommendations on guidelines and health information systems.

Two research officers have been employed on contract, one to support the work on practice guidelines and one to the support work of the National Cardiovascular Information Systems (NCIS) Steering Committee. The researchers are based in the Department of Epidemiology in the Royal College of Surgeons in Ireland. The Evidence-based Health Care Fellow in that department is available for three sessions weekly to advise the Advisory Forum on Cardiovascular Health, on a range of topics including the development and implementation of clinical guidelines.

Practice Guidelines

The results from a questionnaire circulated to health boards in 2002 indicated that there is a high level of awareness of international cardiovascular guidelines, particularly from the European Society of Cardiology and the American Heart Association. Several of the health boards reported examples of local guidelines, particularly for cardiac rehabilitation, heart failure and thrombolysis.

The Irish Cardiac Society was requested by the Advisory Forum on Cardiovascular Health to take a lead role in developing national guidelines for the care of patients with cardiac conditions. Three priorities have been agreed for guideline development and implementation, namely heart failure, acute coronary syndromes and electrophysiology. In addition, guidelines for patient care will be developed as part of *Heartwatch* (see Chapter 5, section 5.2).

Health boards will be supported to disseminate the guidelines, with staff training and review of relevant regional and local structures and processes. Timescales will be agreed for reviewing the implementation of the guidelines.

Staff involved in the development and appraisal of guidelines relevant to cardiac disease are co-investigators in a EU initiative called AGREE - Appraisal of Guidelines for Research and Evaluation in Europe. The aim is to inform cardiovascular health care professionals about guideline development and appraisal. Four regional workshops are being arranged for May / June 2003 and a wide diversity of cardiac health care professionals will be invited to attend.

Planning Cardiovascular Health Information Systems

The NCIS Steering Committee was established to oversee the pilot coronary care register (CHAIR) and to advise on the implementation of cardiovascular health information systems as set out in the Cardiovascular Health Strategy Report *Building Healthier Hearts* (see **Appendix B**).

The Irish Cardiac Surgery Register has collected data since 1983, aiming to monitor trends in adult cardiac surgery. It is proposed to consult with cardiothoracic surgeons about the re-establishment of a complete national register, as a component of a comprehensive cardiovascular health information system.

An inventory of other cardiovascular systems already in place was carried out under contract. The inventory identified several types of cardiology databases. Following consideration and discussion of the information collected to date, plans are being prepared for a modular information system, using different but compatible data sets in different care locations.

In addition, there will ongoing communication with the researchers who are working with the Irish Association of Cardiac Rehabilitation to develop a clinical audit system for cardiac rehabilitation.

CHAIR Pilot Project

The Coronary Heart Attack Ireland Register (CHAIR) project is being piloted from 2002 in the Southern Health Board. CHAIR is a computerised register that gathers information on patients admitted to hospital with a confirmed or suspected acute coronary syndrome. The CHAIR pilot will run for a year, at which time it will be externally evaluated.

Research

In 2001 funding in the order of €500 000 was set aside for research and evaluation and research proposals were invited. One of the aims of the research grants scheme was to engage health professionals in monitoring, clinical audit and evaluation of their work. The Advisory Forum on Cardiovascular Health was involved in the assessment and selection processes. Five projects were chosen and reports from these projects are expected by mid-2004.

Health boards employed fourteen research officers. The potential to develop some national health services research through co-ordination of their work has been identified and work in this area is planned for 2003. In future it is intended to take a systematic and co-ordinated approach to the participation of Irish centres in the Euro Heart Survey.

The Advisory Forum has identified research for service audit as having a high priority. Discussions have been held between representatives of the Advisory Forum on Cardiovascular Health and the Health Research Board (HRB) to assist the development of the Research Strategy for the Cardiovascular Health Strategy consistent with the HRB's national research strategy, *Making Knowledge Work for Health, A Strategy for Health Research*. The Advisory Forum on Cardiovascular Health will consult further with the HRB so as to build research capacity and to maximise research quality and efficiency.

The Advisory Forum will also consult further with stakeholders, researchers and experts to further clarify research topics and to draw up a prioritised research agenda to support the implementation of the Cardiovascular Health Strategy.

Chapter 10
Future Challenges in Implementing the Cardiovascular Health Strategy

Introduction

The first three years of implementing the Cardiovascular Health Strategy has seen a substantial increase in cardiology prevention and treatment services. Through the implementation of the Strategy, these services are already making a difference, providing more accessible, equitable, better quality care for patients with cardiac conditions. The Heart Health Task Force considers that the reasons for the Strategy's successful implementation to date include the Government's ongoing support for the implementation of the Cardiovascular Health Strategy and the enthusiasm of staff at all levels to use the resources provided to best effect.

Achievements to date must be kept in mind when we consider future challenges and how best to meet them to continue the successful implementation of the Strategy. The key challenges facing the future implementation of the Cardiovascular Health Strategy mirror those identified in the National Health Strategy, *Quality and Fairness*.

Improve Population Health

Vigorous multisectoral efforts are required to reduce the prevalence of the major cardiovascular diseases in our population. This may require legislative support and fiscal measures. At a strategic level two critical issues must be addressed, developing health impact assessment and increasing the awareness and capacity of other sectors to contribute to health promotion interventions.
The Heart Health Task Force recommends that the prevention of heart disease be a high priority in moving

forward at both national and regional levels. In that regard, there should be a greater emphasis on intersectoral collaboration for health promotion.

Reduce Inequalities

The link between poverty and ill health is strong and well documented. The National Anti-Poverty Strategy (NAPS) sets the target that the gap in premature mortality between the lowest and highest socio-economic groups should be reduced by at least 10% for circulatory diseases, for cancers, for injuries and for poisoning by 2007.

The Heart Health Task Force considers that health promotion with disadvantaged groups and individuals should be prioritised in future implementation of the Cardiovascular Health Strategy. Links should be established with implementation structures for the National Anti-Poverty Strategy. A plan for health promotion with disadvantaged groups should be prepared and supported by any necessary research.

Equitable Access to Services

i. Resources and infrastructure

The Heart Health Task Force considers it is essential that sufficient revenue and capital funding be provided to complete the implementation of the Cardiovascular Health Strategy.

Based on estimates when the Strategy was launched and on funding to date, approximately €150m additional revenue funding and at least €100m capital funding are required.

ii. Factors with implications for future funding

The Heart Health Task Force requests the Advisory Forum on Cardiovascular Health to oversee a more detailed study of the factors which have cost implications for the future development of cardiology services in Ireland. Such factors include the increased prevalence of cardiovascular conditions in older people and the appropriate application of evidence-based treatments.

iii. Workforce planning

The Heart Health Task Force requests the Advisory Forum on Cardiovascular Health supported by the Department of Health and Children to prepare a report on workforce planning for the continued implementation of the Cardiovascular Health Strategy.

Improve the Quality of Services

i. Increased efficiency

The Heart Health Task Force recommends that an increased proportion of Cardiovascular Health Strategy funds be retained for national co-ordination of initiatives, perhaps through the Health Boards Executive (HeBE) or another similar body.

ii. Practice guidelines, information systems and clinical audit

The Heart Health Task Force recommends that the quality of services for cardiac patients be assured through the implementation of clinical guidelines and a comprehensive cardiovascular health information system as a basis for clinical audit and service planning. It is recognised that this will require continued enthusiasm and commitment of staff, as well as the application of resources to put the necessary systems in place.

iii. Research

While awaiting the Research Strategy being prepared by the Advisory Forum on Cardiovascular Health, the Heart Health Task Force is of the view that a high priority should be given to applied research to support clinical audit. In future, greater resources should be applied to research to support the implementation of the Cardiovascular Health Strategy.

The Way Forward: Monitoring, Evaluation and Consultation

The Heart Health Task Force hopes that the identification of future challenges in *Ireland's Changing Heart* will stimulate debate and discussion by stakeholders. The Task Force recommends that the national and regional cardiovascular committees discuss future challenges in implementing the Cardiovascular Health Strategy. The outcome of these discussions can inform the proceedings of the meeting of the implementation structures planned for June 2003 and contribute to plans to meet future challenges in promoting heart health and treating patients with cardiac disease in Ireland.

Introduction

Submission of Progress Report to the Joint Oireachtas Committee on Health and Children

In accordance with its terms of reference, the Heart Health Task Force submits its second progress report to the Joint Oireachtas Committee on Health and Children. In doing so, the Task Force is presenting a review of progress from the launch of the Strategy in July 1999 to the end of September 2002. This progress report addresses Target 13 of the National Health Strategy *Quality and Fairness* that required the Heart Health Task Force to monitor the Cardiovascular Health Strategy's implementation in accordance with the principles set out in *Building Healthier Hearts*. This target had a deadline of December 2002. The Task Force endorsed this report at its meeting on 13 December 2002.

Aim and Objectives of Report

As stated above, this report reviews the implementation of the Cardiovascular Health Strategy up to September 2002. This is therefore a mid-term review, given the original five year time frame set for the implementation of the Strategy.

Specific objectives for this report are to:

- review recent trends in the epidemiology of cardiovascular disease in Ireland,
- provide information on the Cardiovascular Health Strategy and on the structures established to implement it,
- describe progress to date in the range of activities and service settings addressed in the Strategy, namely health promotion, primary care, pre-hospital care, hospital services and cardiac rehabilitation, as well as information systems, audit and evaluation,
- set out financial allocations, with analysis of posts funded and initiatives undertaken, and
- consider future challenges in implementing the Strategy.

This report does not purport to be a full account of progress of every service either nationally or in each health board but rather to provide an overview and description of the services that have developed through the implementation process. Examples given in relation to developments by individual boards do not infer that the particular board developed that service exclusively but rather as an example of the type of development and of progress nationally. A summary of progress by recommendation is attached at **Appendix A.**

Many systems have been developed to collect and collate information on the implementation of the Cardiovascular Health Strategy since 1999. Included amongst these is the annual meeting of all national and regional committees. In order to gather a more comprehensive oversight, in a consistent manner from the ERHA, regional health boards and other stakeholders responsible for implementing the Strategy, a standardised template was developed. The information returned though this template from all stakeholders was used to compile this implementation report.

chapter 2

Epidemiology of cardiovascular diseases in Ireland

2.1 Introduction

There have been important changes in death and sickness rates from the cardiovascular diseases in Ireland in recent years. These diseases include ischaemic or coronary heart disease (CHD), cerebrovascular disease or stroke, and other diseases of the heart, arteries or veins. While death rates from CHD and stroke have decreased, the number of people living with chronic cardiovascular disease has increased. This presents major challenges for the health services but has implications also for planning other services for older people.

2.2 Life Expectancy

Despite improvements in recent years, life expectancy in Irish men and women in middle age is low in Ireland compared to other EU countries (Figure 1a and 1b). In 1997 at age 40, men in Portugal had lower life expectancy compared to Irish men, and life expectancy in Denmark and in Finland was similar to that for Irish men. For women at age 40, life expectancy was lower in women in Denmark but otherwise life expectancy for women in Ireland was lower than in other countries of the European Union. At age 65 life expectancy for Irish men and women in 1997 was the lowest of all EU countries.

2.3 Trends in Cardiovascular Mortality

Changing mortality patterns in Ireland are shown in Figures 2 to 13. In 1980, 51% of all deaths in Ireland were attributed to the circulatory diseases (including CHD, stroke and diseases of other blood vessels). This decreased to 46% in 1990, 43% in 1997 and to 41% of deaths in 2000 (Figures 2a and 2b). Figure 3 compares the percentage of deaths attributed to cardiovascular disease in 1997 in sub-groups of

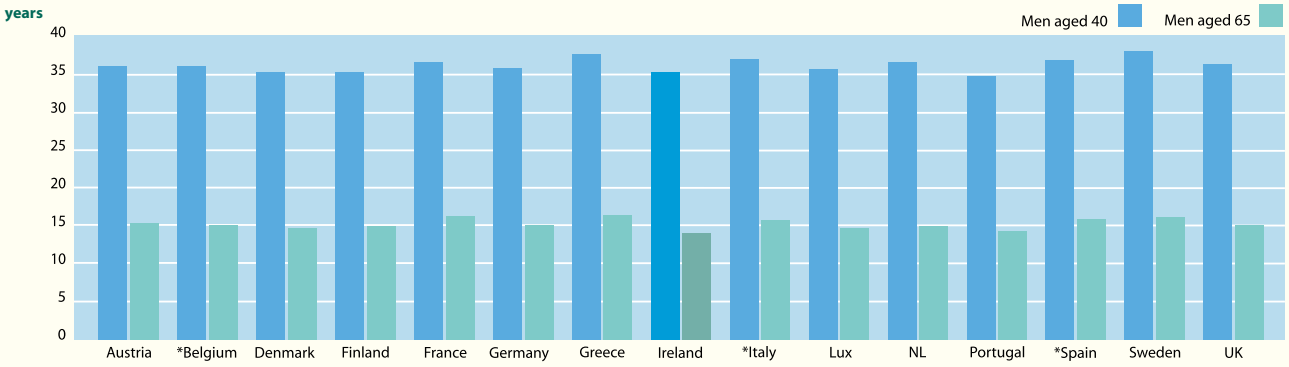

Figure 1a **Life expectancy in middle age for men in EU Countries** Source: EUROSTAT, Demographic Statistics, 2000

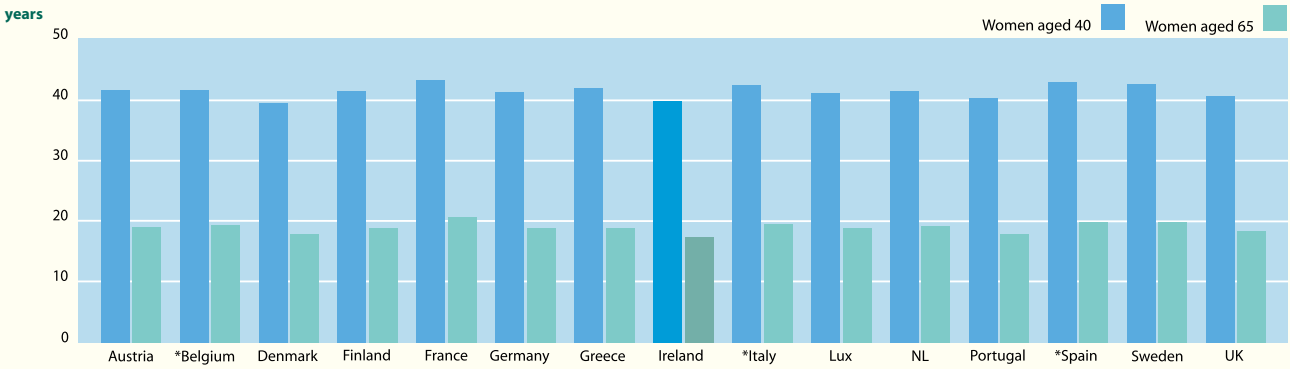

Figure 1b **Life expectancy in middle age for women in EU Countries** Source: EUROSTAT, Demographic Statistics, 2000

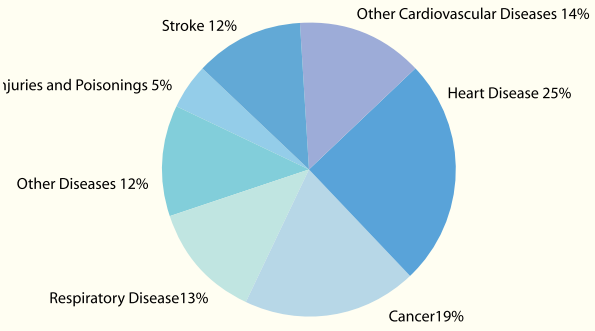

Figure 2a **Principal causes of death at all ages, Ireland 1980**
Source: Central Statistics Office

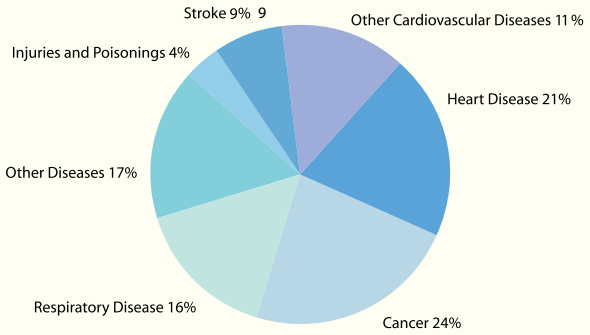

Figure 2b **Principal causes of death at all ages, Ireland 2000**
Source: Central Statistics Office

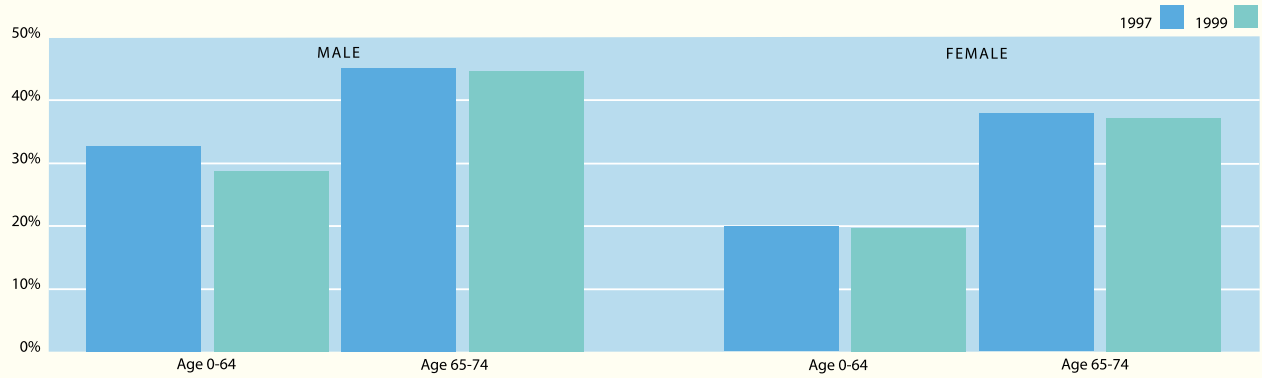

Figure 3 **Percentage of all deaths attributed to cardiovascular disease in Irish men and women, 1997 and 1999** Source: Central Statistics Office

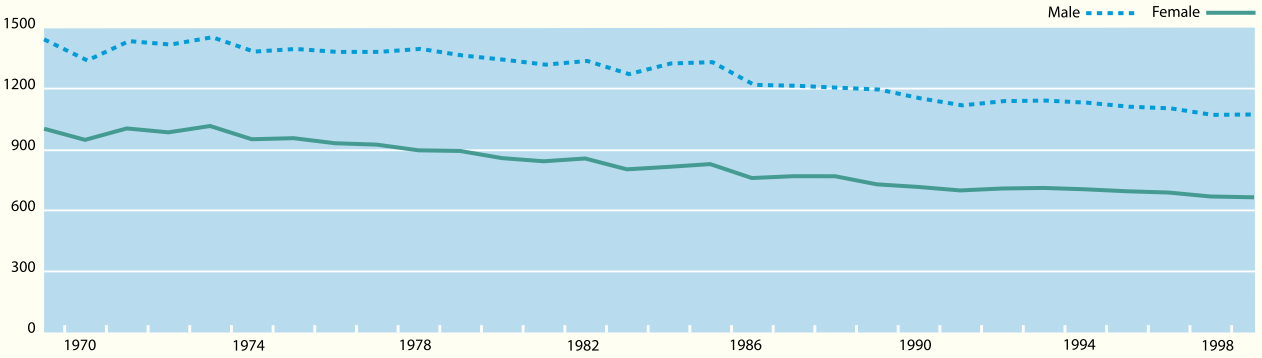

Figure 4 **Age-standardised mortality from all causes in Irish men and women, all ages, 1970-1999** Mortality Rates Per 100 000. Source: Central Statistics Office

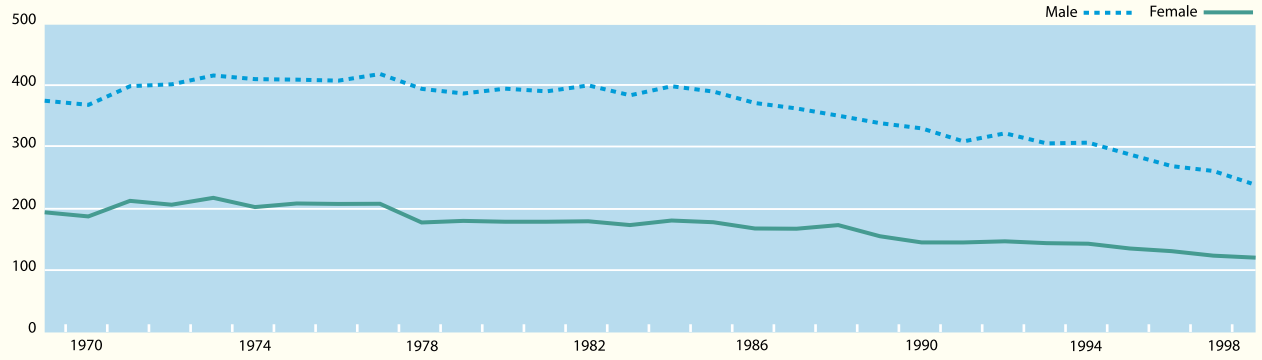

Figure 5 **Age-standardised mortality from CHD in Irish men and women, all ages, 1970-1999** Mortality Rates Per 100 000. Source: Central Statistics Office

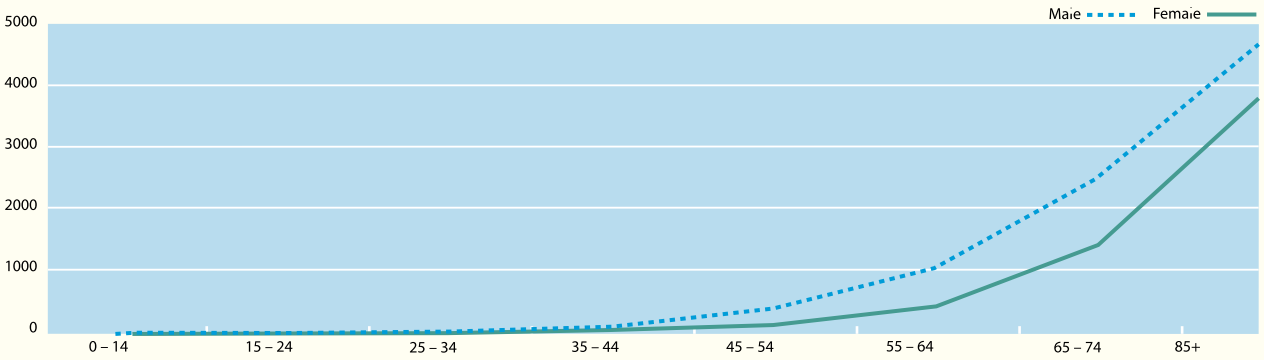

Figure 6 **Age-specific cardiovascular death rates in Irish men and women, 1999** Mortality Rates Per 100 000. Source: Central Statistics Office

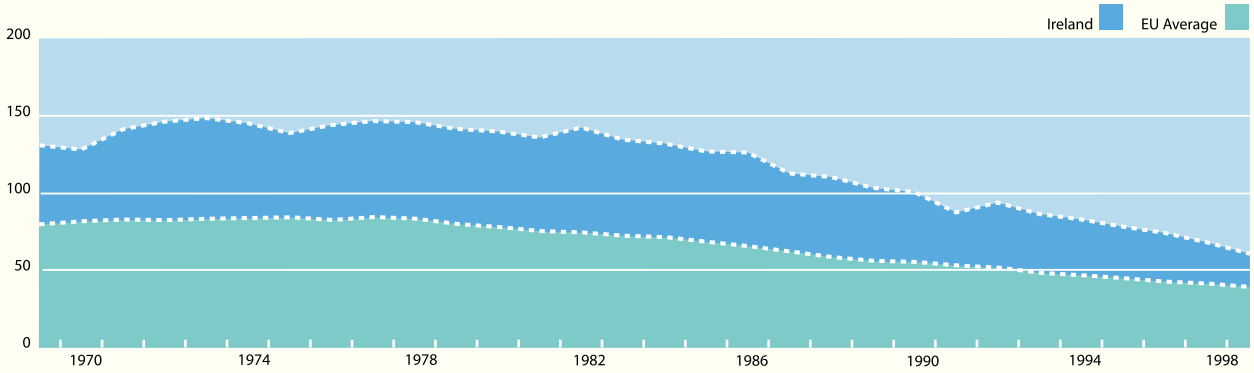

Figure 7a **Age-standardised mortality from CHD in Irish men and EU average for men, 0-64 years, 1970-1999** Mortality Rates Per 100 000.
Source: WHO Health for All Database

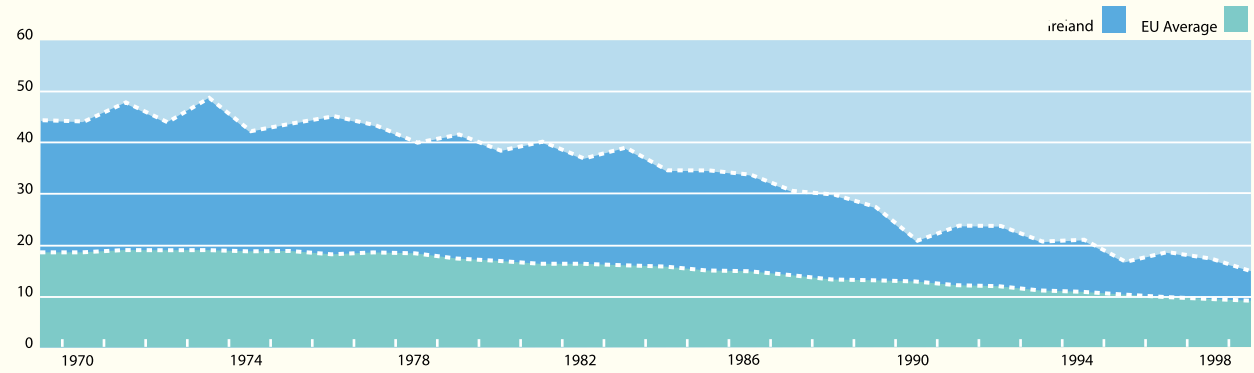

Figure 7b **Age-standardised mortality from CHD in Irish women and EU average for women, 0-64 years, 1970-1999** Mortality Rates Per 100 000.
Source: WHO Health for All Database

the population, as in the Report of the Cardiovascular Health Strategy Group, and those in 1999, the latest available figures. The main change was for men under the age of 65 years where cardiovascular disease accounted for 33% of all deaths in 1997, decreasing to 29% in 1999.

Total mortality rates from all causes at all ages are decreasing in Irish men and women (Figure 4). These death rates are age-standardised, i.e. they are adjusted to take account of the increasing proportions of older people in the population. Much of the decrease in total mortality can be attributed to continuing reductions in mortality from CHD in Irish men and women (Figure 5). While death rates from CHD continue to rise sharply with age (Figure 6), the decline in CHD death rates has been particularly striking in the under-65s and has narrowed the gap between mortality in Irish men and women and the EU average (Figures 7a and 7b). Reductions in mortality have occurred also at older ages (Figure 8 and Table 1). Since the early 1980s, CHD death rates have decreased by 24% and 26% in Irish men and women respectively in the 75 to 79 year age group.

Despite the decreasing death rates and the narrowing of the mortality gap between Irish men and women under 65 years and the EU average, Ireland continues to have high death rates from CHD in the under 65 age group compared to other EU countries (Figures 9a and 9b). Irish men share high CHD death rates with men from Finland and the UK. Among women under 65, CHD death rates are substantially higher in women in Ireland and in the UK compared to other EU countries.

Within Ireland there is some geographic variation in CHD death rates (Figures 10a and 10b). During the 1990s rates for the five years to 1999 were significantly lower for men and women in the Eastern Health Board and for men in the North Western Health Board when compared to the country as a whole. Rates were significantly raised in men and women in the Southern Health Board and in men in the Midland Health Board.

2.4 Hospital Discharges

The decrease in death rates from CHD has not been associated with reduced workloads in the health services. In fact, the opposite has been the case. Hospital discharges with a diagnosis of CHD increased between 1996 and 2001 in all age groups, in men and in women (Table 2). Total in-patient discharges increased from 20 173 to 24 061. The average length of hospital stay decreased from 7.9 to 6.9 days but the increased number of cases meant that there was an overall increase in total bed days. The in-hospital mortality rate decreased from 5.9% to 3.7%, with reductions seen in all age groups, in men and in women.

Hospital discharge data point to a changing pattern of presentation of acute coronary disease. A decreasing proportion of patients with a diagnosis of acute coronary syndrome is discharged with a diagnosis of acute myocardial infarction (heart attack, associated with damage to the heart muscle). An increasing proportion of patients with symptoms suggestive of heart attack has a diagnosis of acute coronary syndrome - reduced blood flow in the coronary arteries sufficient to threaten damage to heart muscle. This changing presentation has been seen in other countries with decreasing death rates from CHD. While the change is seen for all age groups combined, it is most marked in those under the age of 65 years. The reduction in hospital discharges with a diagnosis of acute myocardial infarction occurred in each health board, in men and in women (Table 3).

2.5 Investigations and Interventions

In view of the increased complexity of coronary artery procedures, work is planned to examine the accuracy of the coding of investigations and interventions on patients with CHD as reported to the Hospital In-patient Enquiry (HIPE). This may alter the distribution of patients across categories of interventions e.g. those having an angioplasty procedure

to unblock a coronary artery or those also having a stent inserted to maintain patency of the vessel. While there may be some coding inaccuracies in the returns to HIPE, the data are nevertheless likely to give a valid picture of the overall trends in the number of procedures.

Since the publication of the Report of the Cardiovascular Health Strategy Group there has been a substantial increase in the number of patients undergoing coronary arteriography in hospitals reporting to HIPE (Table 4). Overall, the number of investigations increased from 5 216 to 7 974 between 1996 and 2001. The increase was seen across the age spectrum, in men and women. The increase was largest for residents of the Mid-Western Health Board (Table 5). Rates remained low in 2001 for residents of the Western Health Board but this is expected to improve with increased arteriography in University College Hospital Galway.

There was also a substantial increase over time in angioplasty procedures, from 939 in 1996 to 2 800 in 2001 in hospitals reporting to the Hospital In-patient Enquiry (Table 6). The increase occurred in all age groups, in men and women. The geographic variation was less marked in 2001 compared to that in 1996 (Table 7).

The number of surgical operations for CHD (coronary artery bypass grafts, CABGs) in hospitals reporting to HIPE increased from 1 025 in 1996 to 1 429 in 2001 (Table 8). There was a small reduction in the number of operations in those under 55 years, probably reflecting the increased use of non-surgical intervention in younger patients. There were modest increases in the CABG rates for residents of most health boards (Table 9).

2.6 Cerebrovascular Disease (Stroke)

Death rates from stroke continue to decrease in Irish men and women (Figure 11). Death rates from stroke for Irish men under the age of 65 are very similar to the EU average, though tending to be slightly higher than the EU average in Irish women (Figures 12a and 12b). Death rates from stroke continue to decrease steadily in Irish men and women in the 65 to 74 year age group (Figure 13). Stroke death rates in this age group are consistently higher in Irish men than in Irish women.

Despite the continuing decrease in death rates from cerebrovascular disease (stroke) the number of hospital discharges with this diagnosis increased between 1996 and 2001 (Table 10). The increase was marked in those over the age of 75 years, increasing from 5 972 discharges in 1996 to 7 417 discharges in 2001. There was a decline in mortality from 14.5% to 12.2%, with little change in the average length of hospital stay (17.5 and 17.7 days). Overall, there was a substantial increase in the number of hospital bed days in patients with a discharge diagnosis of stroke, from 236 683 days in 1996 to 276 173 days in 2001. There was a reduction in the hospital discharge rate with a diagnosis of stroke in men but a substantial increase in women, reflecting the high incidence rate of stroke in older age and the higher proportions of women surviving to old age (Table 11).

2.7 Prescriptions

There is evidence from Ireland as well as from other countries that a substantial proportion of people were not receiving evidence-based medications to reduce the risk of symptomatic coronary artery disease (primary prevention) or the risk of a recurrent coronary event (secondary prevention). Between 1997 and 2001 there was a 47% increase in the frequency of prescriptions for cardiovascular disease for people covered by the General Medical Services (GMS) (Payments) Board (Table 12). Some of the increase was in treatments for raised blood pressure and raised blood cholesterol and some was in treatments used to reduce risk of recurrent events. Some of the increase in prescriptions in the GMS reflects the increase in the number of people living into older age and the increase in the numbers identified with chronic heart failure.

2.8 Risk Factors for Cardiovascular Disease

The Report of the Cardiovascular Health Strategy Group examined trends in tobacco consumption, in view of the increased risk of cardiovascular disease in smokers. Information from the Revenue Commissioners shows that the number of cigarettes retained for use in Ireland has increased in recent years (Figure 15a). While the volume of other tobacco products retained in Ireland had been decreasing steadily, this has now plateaued (Figure 15b). Information from other sources indicates that there have been improvements in other risk factors for CHD, such as blood pressure and blood cholesterol levels. While there is evidence that more people are being prescribed medication to reduce levels of blood pressure or cholesterol, the prevalence of these conditions remains high in older people in Ireland. There is also concern about the high prevalence of inactivity and the increasing prevalence of obesity and of diabetes mellitus in Ireland.

2.9 Implications of Changing Epidemiology

The Irish data together with research in other countries suggest that the cardiovascular disease epidemic continues to evolve:

- cardiovascular mortality rates, including death rates from CHD and from cerebrovascular disease, are decreasing steadily, patients are older at presentation and the length of survival after the onset of CHD symptoms has increased,
- there is a higher prevalence in the population of those at high risk of recurrence of symptoms of CHD, with increasing need for further acute care, repeat procedures and ongoing disease management, secondary prevention and cardiac rehabilitation,
- the prevalence of heart failure in the oldest age groups has increased greatly, and
- the increased prevalence of obesity and decreased physical activity levels are associated with increased risk of diabetes and the accompanying risk of vascular disease.

While CHD mortality has decreased at all ages, it should be remembered that we continue to have high mortality rates when compared to other developed countries. It is of particular concern that the decrease in cardiovascular mortality has been unequal in different social groups. *Inequalities in Mortality*, a report by the Institute of Public Health on mortality throughout Ireland from 1989 to 1999, found that in the south of Ireland death rates from circulatory diseases were almost three times higher in the semi - and unskilled working classes compared to professionals.

The cardiovascular diseases remain an important cause of mortality and morbidity in middle age in Ireland. While the downward mortality trends described are to be welcomed, these diseases will continue to have a major impact on the demand for health and other services for older people in the years to come. Health promotion to increase the length of healthy, active life presents many challenges to Irish society.

Developments in implementing the Cardiovascular Health Strategy have improved access to diagnostic, treatment and preventive services for patients with CHD. Nevertheless, supply does not yet meet demand, particularly at a distance from the major centres. In addition, evidence-based technological advances, such as drug eluting stents, and additional indications for interventions, such as coronary artery intervention as a treatment for acute myocardial infarction, present major logistical and fiscal challenges for our health services.

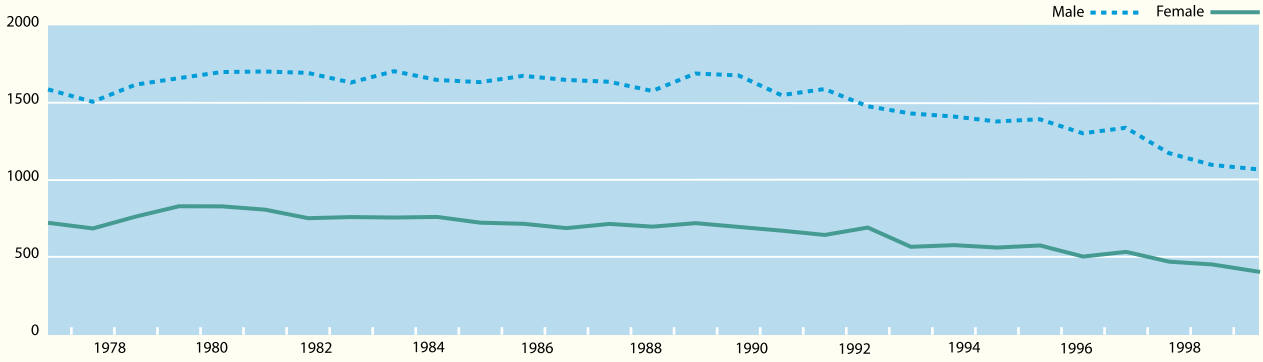

Figure 8 **Mortality from CHD in Irish men and women, aged 65-74 years, 1978-1999** Mortality Rates Per 100 000. Source: WHO Health for All Database

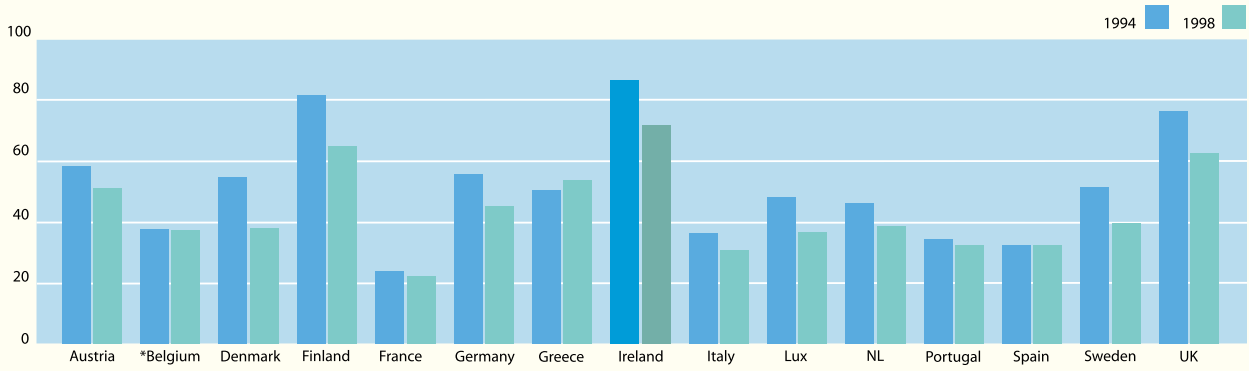

Figure 9a **Age-standardised CHD death rates for men in EU countries, 0-64 years, 1994 and 1998** Mortality Rates Per 100 000. Source: WHO Health for All Database

* Last available figures for Belgium is for the year 1996

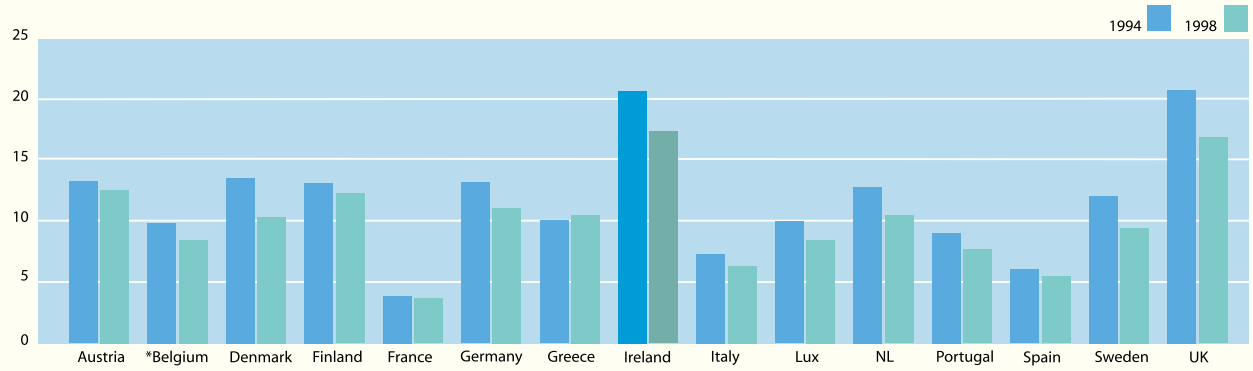

Figure 9b **Age-standardised CHD death rates for women in EU countries, 0-64 years, 1994-1998** Mortality Rates Per 100 000. Source: WHO Health for All Database

* Last available figures for Belgium is for the year 1996

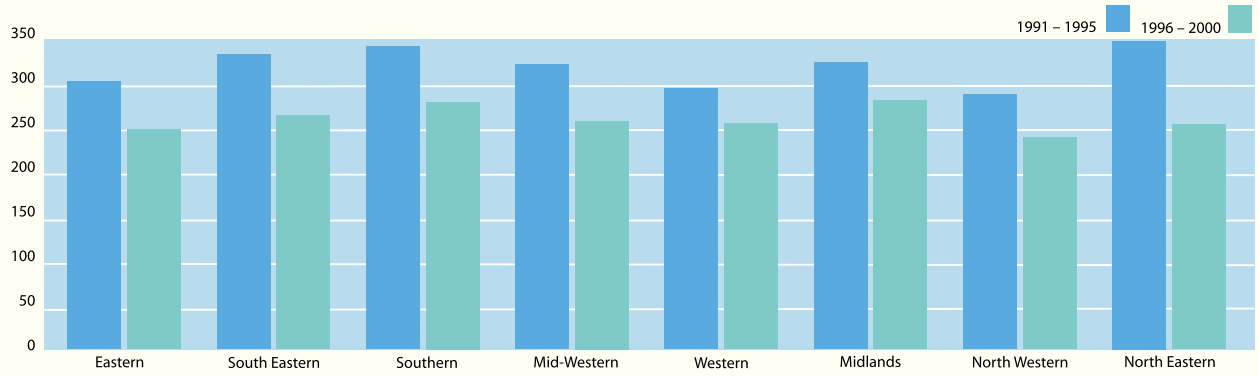

Figure 10a **Age-standardised CHD mortality by health board for men of all ages, 1996 and 2000** Mortality Rates Per 100 000. Source: Public Health Information System

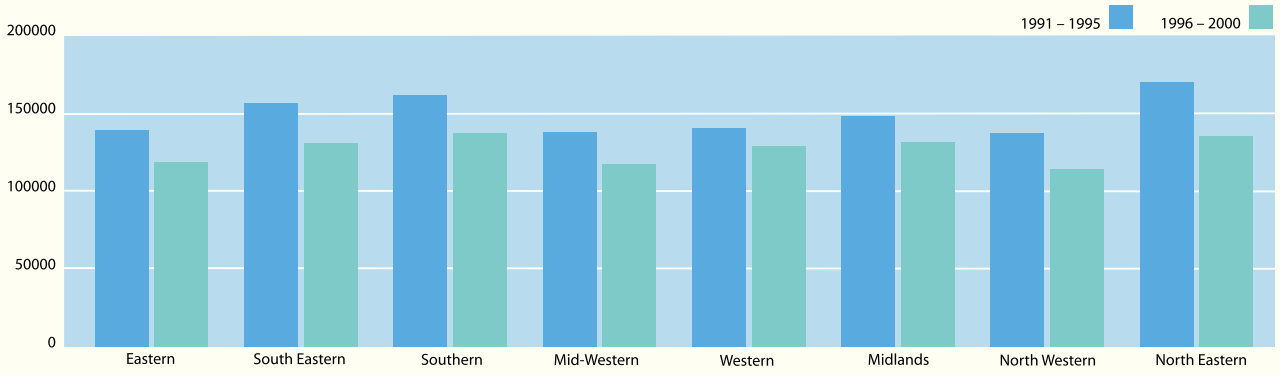

Figure 10b **Age-standardised CHD mortality by health board for women of all ages, 1996 and 2000** Mortality Rates Per 100 000. Source: Public Health Information System

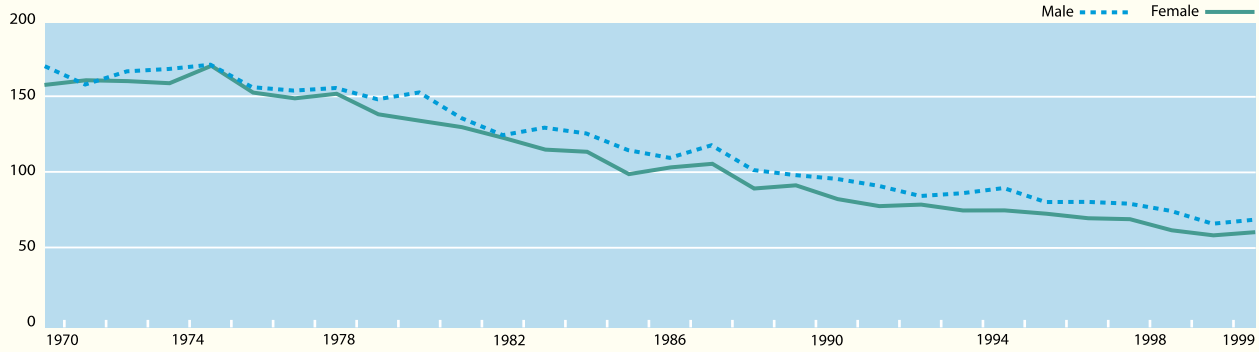

Figure 11 **Age-standardised mortality from cerebrovascular disease in Irish men and women, all ages, 1970-1999** Mortality Rates Per 100 000.
Source: WHO Health for All Database

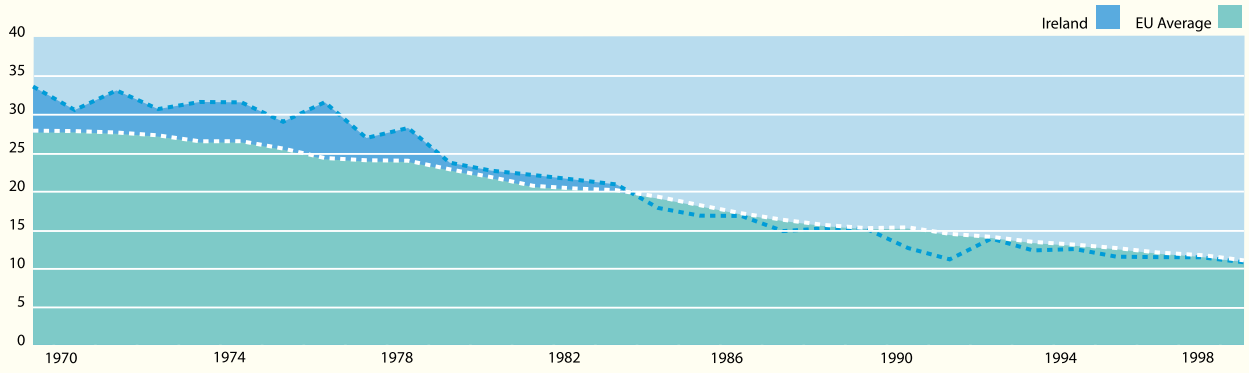

Figure 12a **Age-standardised mortality from cerebrovascular disease in Irish men and EU average for men, 0-64 years, 1970-1999** Mortality Rates Per 100 000. Source: WHO Health for All Database

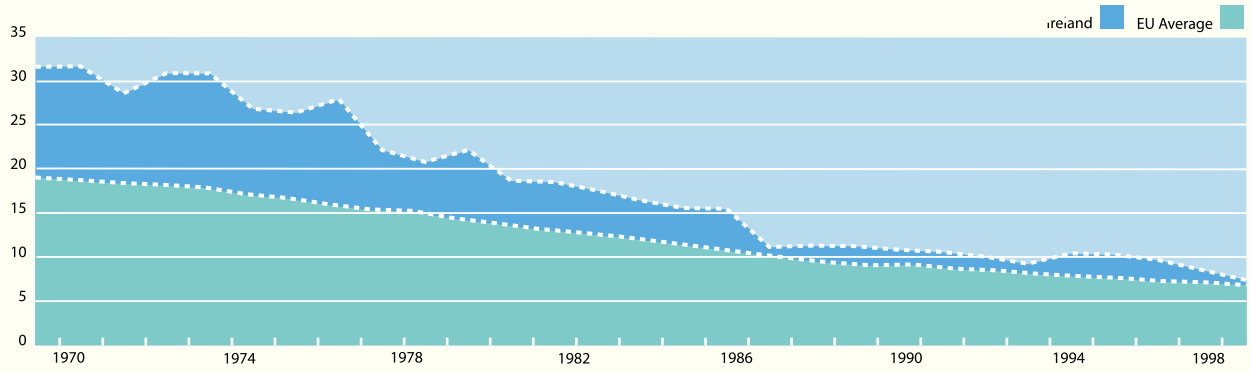

Figure 12b **Age-standardised mortality from cerebrovascular disease in Irish women and EU average for women, 0-64 years, 1970-1999**
Mortality Rates Per 100 000. Source: WHO Health for All Database

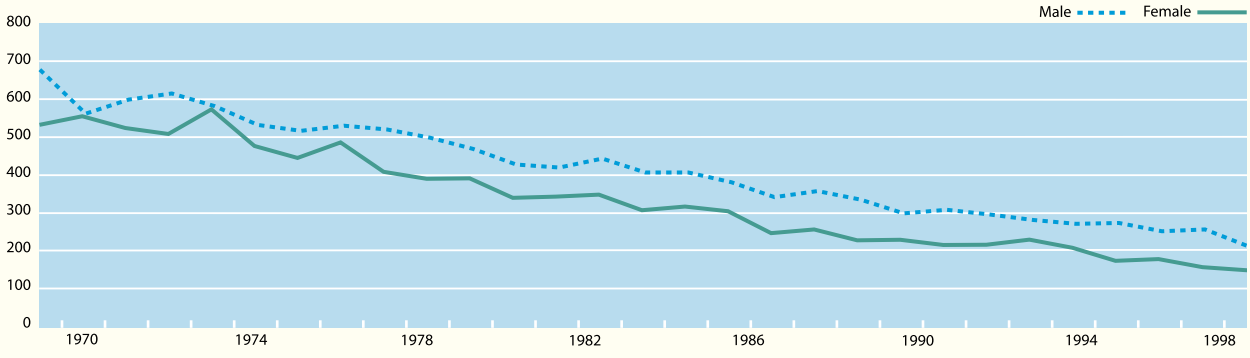

Figure 13 **Mortality from cerebrovascular disease in Irish men and women, 65-74 years, 1970-1998** Mortality Rates Per 100 000. Source: WHO Health for All Database

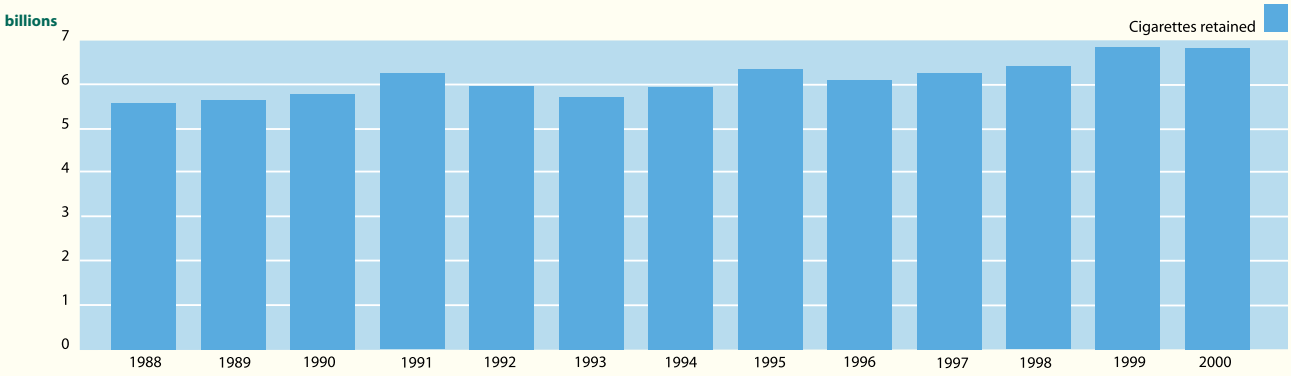

Figure 14a Trends in cigarettes retained for use in Ireland, 1988-2000 Source: Revenue Commissioners Statistical Report, 2000

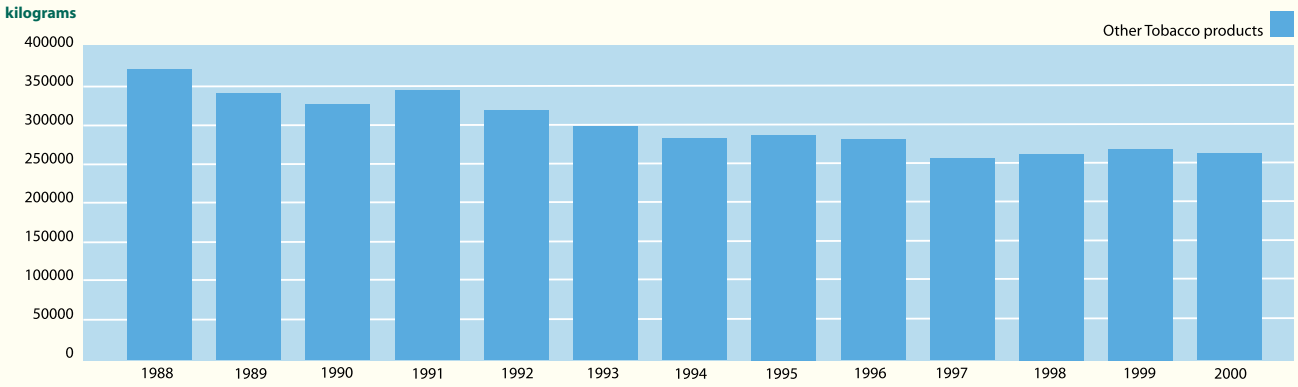

Figure 14b Trends in other tobacco products retained for use in Ireland, 1988-2000 Source: Revenue Commissioners Statistical Report, 2000

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Table 1 **Changes in death rates between 1980-1982 and 1997-1999 from coronary heart disease (CHD) and from all causes**

Age Group (years)	Men	Women
CHD: < 65 years	-51%	-58%
65-69	-40%	-46%
70-74	-32%	-37%
75-79	-24%	-26%
CHD: all ages	-34%	-30%
All causes, all ages	-19.5%	-22%

Table 2 **Hospital In-patient Statistics, 1996 and 2001, discharges with a diagnosis of CHD**
(primary diagnosis, ICD-9-CM codes 410-414)

Sex	Age	Discharges	Bed Days	Average Length of Stay	Mortality Rate %
	< 55	3 359	20 103	6.0	1.0
Males	55-64	4 035	30 813	7.6	1.9
1996	65-74	3 899	34 444	8.8	5.8
	75+	2 142	18 884	8.8	14.8
	< 55	3 894	20 381	5.2	0.5
Males	55 -64	4 883	29 854	6.1	1.4
2001	65-74	4 814	34 075	7.1	3.1
	75+	2 681	23 246	8.7	10.1
	<55	780	5 176	6.6	1.9
Females	55-64	1 455	9 975	6.9	2.2
1996	65-74	2 361	19 508	8.3	6.2
	75+	2 142	21 461	10.0	15.7
	<55	1 076	5 658	5.3	0.6
Females	55-64	1 727	10 477	6.1	1.3
2001	65-74	2 550	18 800	7.4	3.1
	75+	2 436	22 740	9.3	11.6
Total 1996		20 173	160 364	7.9	5.9
Total 2001		24 061	165 231	6.9	3.7

Table 3 **Age-standardised discharge rates for AMI by health board. Hospital In-patient Enquiry, 1996 and 2001.**
(Rates per 100,000 population, ICD-9-CM code 410, primary diagnosis, includes only one admission per person)

Health Board	Males		Females		Total	
	1996	2001	1996	2001	1996	2001
Eastern	238.7	191.2	96.4	81.5	160.0	130.3
Midland	215.9	198.4	90.0	63.3	153.5	129.7
Mid-Western	218.6	153.9	89.5	72.2	152.3	112.0
North Eastern	311.3	229.1	134.6	88.6	221.5	156.3
North Western	237.3	229.4	118.2	87.6	179.5	158.7
South Eastern	229.0	218.6	103.6	81.5	165.8	149.4
Southern	204.5	174.5	78.0	66.2	138.8	118.1
Western	218.4	173.4	82.4	74.2	149.7	123.5
Total	231.8	192.2	96.5	77.6	161.3	132.1

Table 4 **Coronary arteriography in hospitals reporting to HIPE, 1996 and 2001, by age and sex**

Age Group	<55	55 – 64	65 – 74	75+	Total
Males 1996	1 337	1 225	860	127	3 549
Males 2001	1 693	1 681	1 502	437	5 313
Females 1996	468	586	507	106	1 667
Females 2001	671	817	854	319	2 661
Totals 1996	1 805	1 811	1 367	233	5 216
Totals 2001	2 364	2 498	2 356	756	7 974

Table 5 Coronary arteriography by health board of residence, age-standardised rate per 10 000 population. HIPE data, 1996 and 2001

Health Board	Males		Females		Total	
	1996	2001	1996	2001	1996	2001
Eastern	32.6	35.1	15.4	16.9	23.4	25.2
Midland	24.1	36.4	8.9	16.4	16.6	26.5
Mid-Western	19.1	53.4	8.3	26.2	13.7	39.8
North Eastern	23.5	28.5	10.5	13.9	17.1	21.1
North Western	19.5	21.2	7.5	10.4	13.7	16.0
South Eastern	19.5	31.5	8.2	14.7	13.9	23.1
Southern	21.3	29.9	7.8	12.6	14.5	21.1
Western	5.3	5.5	2.0	2.1	3.7	3.8
Total	23.0	30.8	10.3	14.6	16.5	22.5

Table 6 PTCAs carried out in hospitals reporting to HIPE, 1996 and 2001, by age and sex.

Age Group	<55	55 – 64	65 – 74	75+	Total
Males 1996	255	226	155	39	675
Males 2001	621	710	561	188	2 080
Females 1996	46	92	105	21	264
Females 2001	144	207	261	108	720
Totals 1996	301	318	260	60	939
Totals 2001	765	917	822	296	2 800

Table 7 PTCA by health board of residence, age-standardised rate per 10 000 population. HIPE data, 1996 and 2001.

Health Board	Males		Females		Total	
	1996	2001	1996	2001	1996	2001
Eastern	7.3	14.4	2.9	5.3	4.9	9.4
Midland	5.8	16.5	1.8	5.5	3.8	11.0
Mid-Western	2.4	10.1	0.9	1.9	1.7	6.0
North Eastern	6.7	12.6	1.5	4.2	4.1	8.4
North Western	4.3	15.1	1.1	3.5	2.8	9.5
South Eastern	3.3	12.3	0.8	3.5	2.1	7.9
Southern	2.5	12.0	1.2	2.9	1.8	7.4
Western	1.8	8.9	0.6	3.0	1.2	6.0
Total	4.7	12.7	1.7	4.0	3.2	8.3

Table 8 CABGs carried out in hospitals reporting to HIPE, 1996 and 2001, by age and sex.

Age Group	<55	55 – 64	65 – 74	75+	Total
Males 1996	227	293	241	26	787
Males 2001	206	413	406	87	1 112
Females 1996	39	73	108	18	238
Females 2001	33	88	168	58	347
Totals 1996	266	366	349	44	1 025
Totals 2001	239	501	574	145	1 459

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Table 9 **CABG by health board of residence, age-standardised rate per 10 000 population. HIPE data, 1996 and 2001.**

Health Board	Males		Females		Total	
	1996	2001	1996	2001	1996	2001
Eastern	6.3	8.0	1.6	2.2	3.8	4.9
Midland	3.4	6.6	2.2	2.3	2.8	4.5
Mid-Western	4.5	4.6	1.0	1.6	2.8	3.0
North Eastern	4.6	6.5	1.5	1.5	3.1	3.9
North Western	5.1	4.9	1.6	1.1	3.4	3.0
South Eastern	4.5	6.2	1.6	1.8	3.1	4.0
Southern	7.3	9.2	1.3	2.0	4.3	5.5
Western	3.8	5.0	1.4	1.8	2.6	3.5
Total	5.4	6.9	1.5	1.9	3.4	4.4

Table 10 **Hospital In-patient Statistics, 1996 and 2001, discharges with a diagnosis of cerebrovascular disease** *(ICD-9-CM codes 430-438).*

	Discharges	Bed Days	Average Length of Stay	Mortality Rate %
Males 1996				
< 55	832	11 678	14.0	8.5
55 -64	1 128	15 402	13.7	7.4
65-74	2 474	36 472	14.7	10.8
75+	2 622	44 666	17.0	18.4
Males 2001				
< 55	967	14 973	15.5	7.5
55 -64	1 349	17 951	13.3	6.4
65-74	2 442	37 554	15.4	9.4
75+	3 173	58 835	18.5	15.9
Females 1996				
< 55	687	9 461	13.8	10.3
55 -64	713	9 782	13.7	10.4
65-74	1 739	33 968	19.5	12.7
75+	3 350	75 254	22.5	20.6
Females 2001				
< 55	823	12 118	14.7	9.0
55 -64	787	11 820	15.0	7.4
65-74	1 798	34 908	19.4	9.7
75+	4 244	88 014	20.7	16.3
Totals 1996	13 545	236 683	17.5	14.5
Totals 2001	15 583	276 173	17.7	12.1

Of these, cerebrovascular disease was the principal diagnosis in 8 537 discharges (63%). Of these, cerebrovascular disease was the principal diagnosis in 10 117 discharges (65%).

Table 11 **Age-standardised discharges with a diagnosis of cerebrovascular disease by health board. Hospital In-patient Enquiry, 1996 and 2001.**
(Rates per 100,000 population, ICD-9-CM codes 430-438, primary diagnosis, includes only one admission per person)

Health Board	Males		Females		Total	
	1996	2001	1996	2001	1996	2001
Eastern	277.7	222.9	190.6	219.0	228.8	218.4
Midland	233.9	266.0	216.7	278.6	226.9	272.0
Mid-Western	246.8	215.7	179.9	223.6	210.9	219.6
North Eastern	264.3	280.8	194.3	281.0	227.1	280.8
North Western	244.4	261.2	181.9	285.5	211.3	272.9
South Eastern	238.7	230.5	175.9	256.3	205.9	243.1
Southern	225.0	227.7	157.3	241.8	187.6	232.8
Western	240.4	272.9	178.7	296.5	207.2	284.1
Total	251.3	236.1	182.3	246.8	214.0	240.6

Table 12 **Prescriptions for disease of the cardiovascular system paid for by the General Medical Services (Payments) Board, 1997 and 2001**

Product Category	Prescribing Frequency 1997	Prescribing Frequency 2001	% of scheme in 1997	% of scheme in 2001	Ingredient Cost in € Millions for 1997	Ingredient Cost in € Millions for 2001	% of scheme for 1997	% of scheme for 2001
Cardiac Therapy	714 206	840 914	3.7	3.3	5.52	7.25	3.1	2.1
Antihypertensives	134 575	179 559	0.7	0.7	1.84	3.84	1.0	1.1
Diuretics	1 098 195	1 369 651	5.5	5.3	3.43	3.92	1.9	1.2
Peripheral vasodilators	67 092	65 942	0.3	0.3	1.12	1.08	0.6	0.3
Vasoprotectives	79 454	81 918	0.4	0.3	0.48	0.50	0.3	0.2
Beta Blocking Agents	603 631	911 508	3.0	3.6	4.72	6.89	2.6	2.0
Calcium channel blockers	504 552	641 189	2.5	2.5	7.78	10.82	4.4	3.2
Renin-angiotensin system	527 152	1 012 712	2.6	4.0	9.44	18.78	5.3	5.6
Serum lipid reducing agents	129 324	610 583	0.7	2.4	4.38	20.89	2.4	6.2
Total	**3 885 181**	**5 713 976**	**19.4**	**22.3**	**38.71**	**73.97**	**21.6**	**21.9**

Source: General Medical Service (Payments) Board

chapter 3

Background, Structures and Funding

3.1 The Cardiovascular Health Strategy – Building Healthier Hearts

For several decades death rates from coronary heart disease (CHD) have been high in Ireland compared to many other developed countries. The three principal modifiable risk factors for CHD are smoking, raised levels of cholesterol in the blood and raised blood pressure, all of which have a relationship to lifestyle, including diet and physical activity. While individuals have responsibility for their own health behaviours, social and economic factors play an important part in the development of the disease. Measures to reduce such factors and to address inequalities in risk between groups in our society must therefore be addressed.

In order to reduce such inequalities and to achieve health and social gain in relation to cardiovascular diseases, a comprehensive strategy was developed which was accepted and endorsed by Government (Government decision S180/20/10/0058 of 7 July, 1999). An Taoiseach, Mr. Bertie Ahern T.D., launched the report of the Cardiovascular Health Strategy Group, *Building Healthier Hearts*, in July 1999. The Cardiovascular Health Strategy addressed the common aspects of prevention of cardiovascular diseases (CHD, stroke and diseases of other arteries with similar aetiology), as well as the treatment and rehabilitation of patients with CHD.

The overall aim of the strategy is to improve the heart health status of the population by focussing on the following four areas:

- reducing the risk factor profile in the general population,
- detecting those at high risk,
- dealing effectively with those who have clinical disease, and
- ensuring the best survival and quality of life outcome for those who recover from an acute attack.

This comprehensive report and its recommendations are far reaching. The Department of Health and Children set a medium-term objective to bring Ireland's levels of premature deaths from cardiovascular disease in line with the EU average at a minimum and a long-term objective of reducing our rates to those of the best performers in the EU. Implementation of the Strategy's 211 evidence-based recommendations will result in substantial development and enhancement of a wide range of health services, including health promotion, primary care, pre-hospital care, hospital services and cardiac rehabilitation, and in information systems, audit and evaluation.

3.2 Structures for Implementing the Cardiovascular Health Strategy

One of the Department of Health and Children's basic principles has been to work in partnership with all relevant agencies in the statutory and voluntary sectors. *Building Healthier Hearts* identified that co-ordinated action involving a wide range of government departments, statutory bodies, social partners and voluntary organisations would be needed for its effective implementation.

As a measure of the Government's commitment to the Report of the Cardiovascular Health Strategy Group, structures were put in place at national, regional and local level to support its implementation. The structures take into account the need to ensure a high level of engagement from all concerned and to sustain a co-ordinated programme over a long period. The structures for implementation are:

- Heart Health Task Force,
- Advisory Forum on Cardiovascular Health,
- National Cardiovascular Information Systems Steering Committee,
- Joint Working Group to Review Consultant Cardiology Manpower Requirements,
- National Steering Committee for the Initial Implementation Phase of a National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease,
- Interdivisional Working Group on Cardiovascular Health within the Department of Health and Children, and
- Regional cardiovascular health steering / implementation committees at health board / Authority level.

The terms of reference and membership for these committees are set out at **Appendix B**.

The key structures to support and oversee the overall implementation process and provide expert advice are the Heart Health Task Force and the Advisory Forum on Cardiovascular Health. The Task Force has responsibility for reviewing short, medium and long-term proposals by government departments and other statutory bodies charged with achieving timely and co-ordinated implementation of elements of the Cardiovascular Health Strategy. In addition, it is charged with implementing the inter sectoral recommendations contained in the Strategy.

The Advisory Forum advises the Task Force and the Department of Health and Children on prioritisation of the recommendations and on best practice in cardiovascular disease prevention, detection, treatment and rehabilitation. To enhance its efficiency, the Advisory Forum established four working groups, on health promotion, primary care and pre-hospital care, hospital services, and cardiac rehabilitation. Prioritisation of the Strategy's recommendations was an important early task of the sub-groups of the Advisory Forum on Cardiovascular Health.

In line with the strategic management approach within the public sector, responsibility for the recommended health service developments rests with the health boards. The

Cardiovascular Health Strategy identified geographic variation in mortality from CHD and unequal access to services across health board areas. To ensure the effective implementation of the Strategy within each region and to ensure co-ordinated implementation of the Strategy at national and local level, the Eastern Regional Health Authority and the health boards were requested to establish regional structures for implementation.

3.3 National Conference November 1999

Following the launch of the Strategy, a major national conference for stakeholders was hosted by the then Minister for Health and Children, Mr. Brian Cowen T.D.. The conference took place in Dublin Castle on 5 November 1999 and had the following objectives:

- to present the findings and recommendations of the Report of the Cardiovascular Health Strategy Group, and
- to discuss the recommendations with representatives of organisations with an interest in or responsibility for their implementation.

Mr. David Byrne, EU Commissioner for Food Safety and Public Health, gave the keynote address in which he recognised the concerns relating to cardiovascular disease in Ireland compared to other Member States. The Commissioner also outlined strategies of the European Commission to tackle health determinants, both through policies that support healthy choices and by specific preventive actions.

There was widespread support among the 254 conference delegates that a partnership model is the best approach to effect change in lifestyle and health behaviours.

3.4 Prioritisation of Strategy's Recommendations

In 2001 the Minister for Health and Children launched a report prepared by the Advisory Forum on Cardiovascular Health titled *Implementation of the Cardiovascular Health Strategy, Work Programme 2001 to 2004*. The report's proposals informed the planning and funding process for implementing the Cardiovascular Health Strategy since 2001.

This Work Programme sets out the priorities in implementing the 211 recommendations in the Cardiovascular Health Strategy Report *Building Healthier Hearts* and supports:

- identification of the timing and estimation of the resources necessary to implement components of the Cardiovascular Health Strategy,
- service planning by the Department of Health and Children, health Authority / boards and other agencies,
- identification of necessary linkages with government departments and voluntary organisations,
- an integrated and efficient implementation process, and
- the Work Programme forms a template against which progress by all of the agencies involved can be assessed.

Some of the Advisory Forum's working groups were assisted in identifying priorities by consultation meetings. The Working Group on Health Promotion held such a meeting in association with the National Heart Health Alliance in December 2000. The Hospital and Pre-hospital Working Group was informed by meetings with key stakeholders in May and October 2001 respectively, organised by the Irish Heart Foundation. The Primary Care Working Group had identified priorities early in 2001 but the process was further informed by a similar Irish Heart Foundation / Forum meeting held in October 2001.

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3.5 Development of Funding Framework

In 2001 the Advisory Forum on Cardiovascular Health identified the principles of a funding framework for the Strategy. These included that:

- plans by health boards / Authority should ensure development of priority service areas, in accordance with the Strategy's recommendations,
- some funding should be available for innovative projects,
- co-operation between boards for development of services should be encouraged, especially for services not required to be provided by each board, and
- funding decisions should promote equity, quality and accountability.

3.6 Funding Allocated to the Cardiovascular Health Strategy

The Government decision of 7 July, 1999 authorising the publication of *Building Healthier Hearts* agreed that while no revenue measure would be formally dedicated to the Strategy, funding would be provided in whole or in part by increased taxation on tobacco consumption and / or a levy on tobacco companies. Up to and including 2002, the Strategy has been funded from the increased taxation on tobacco since the 1999 Budget. To September 2002, the Government has allocated a total sum of €45m towards the implementation of the Cardiovascular Health Strategy, as set out below.

In addition €4.2m has been allocated through the GMS Payments Board for the provision of Nicotine Replacement Therapy (NRT) to people under the General Medical Scheme (GMS).

The National Development Plan is providing some additional funding for capital projects being undertaken by health boards as part of the implementation of the Strategy.

i. 2000

€15m was allocated in 2000:

- €12.70m to boards / Authority.
- €2.54m was used to implement initiatives at a national level.

ii. 2001

€19m was allocated in 2001:

- €16.40m to boards / Authority.
- €2.54m was used to implement initiatives at a national level.

In addition €1.2m was made available to the GMS Payments Board for the provision of NRT to people covered by the GMS.

iii. 2002

€11m was allocated in 2002:

- €10m to boards / Authority.
- €1.0m was used to implement initiatives at a national level. Due to funding for once off initiatives in 2001 rolling over to the base in 2002, a total of €2.8m was available in 2002 for national initiatives.

In addition €3.0m was made available to the GMS Payments Board for the provision of NRT to people covered by the GMS (from 1 January 2002 to 31 October 2002).

3.7 Estimation of Requirements, Allocation and Monitoring of Funding

To guide prioritisation of expenditure during 2000, health boards were advised that, as far as possible, basic infrastructure (staff and equipment) should be put in place

during the first year. Health boards were informed of national initiatives envisaged for 2000 and advised that initiatives at regional and local level should complement national programmes. However, it was also emphasised that individual boards should tailor their proposals to meet local needs. The proposals from boards were brought to the attention of the Advisory Forum, after which plans for each board were agreed.

In October 2000, the Department of Health and Children, based on advice from the Advisory Forum, (section 3.4) issued guidelines to boards on the prioritisation of recommendations for service developments in 2001. This guidance was used by boards to prepare plans and to estimate implementation costs. The Department of Health and Children used the guidelines to evaluate health board submissions to secure funding and to support decisions on the distribution of funding for 2001. Similar approaches to service planning and the allocation of funds were adopted in 2002 and 2003. **Appendix C** contains details of national initiatives and allocations to health Authority / boards for 2000, 2001 and 2002.

Each quarter boards / Authority return a quarterly financial report to the Department of Health and Children setting out in respect of funds allocated from the Cardiovascular Health Strategy, development plans for the year, expenditure to date and estimated costs for each post for the current and following year. These returns allow the Department of Health and Children track and report on the number of additional posts filled and initiatives undertaken under the Cardiovascular Health Strategy throughout the country.

Table 13 Breakdown of additional posts funded under the Cardiovascular Health Strategy, 2000 to 2002, Whole Time Equivalents

Health Sector	2000	2001	2002	Total
Health Promotion	70.5	64.5	4	139
Primary Care and Pre-Hospital	37	42	34	113
Hospitals	117	156	55	328
Cardiac Rehabilitation	36	63.5	9.5	109
Audit / Research	31.5	44	5.5	81
Total	292	370	108	770

3.8 Additional Posts

In 2000, 2001 and 2002 the Cardiovascular Health Strategy funding supported a wide range of initiatives and a total of 770 additional posts were funded. These are summarised in Table 13 and the details are set out in **Appendix C**.

chapter 4

Health Promotion

4.1 Introduction

The Cardiovascular Health Strategy recognises that intensive efforts will be required to prevent cardiovascular disease at a population level and there are 58 recommendations on health promotion. The importance of integration of national, regional and local campaigns, of sustained initiatives and attention to disadvantaged communities is recognised by the Strategy. There are specific recommendations on smoking, diet and nutrition, physical activity, alcohol and blood pressure.

Key players in implementing the health promotion recommendations include the Department of Health and Children, the Department of Education and Science, the other government departments which have a role in intersectoral initiatives, the health promotion departments of the regional Authority / health boards, other state agencies with relevant responsibilities, such as the Irish Sports Council and the voluntary sector.

In December 2000, the Advisory Forum on Cardiovascular Health and the National Heart Health Alliance held a one day workshop to identify for each recommendation the lead agency with responsibility for implementation and other key stakeholders, as well as the key tasks required. The report of the workshop, *Priority Planning for Health Promotion in the Cardiovascular Health Strategy*, continues to inform the setting of priorities for implementing the Strategy's health promotion recommendations.

4.2 Resources and their Management

Health promotion programmes are developed using information on the health and lifestyle of the population. The first Survey of Lifestyles, Attitudes and Nutrition (SLÁN) was completed in 1998 and provided information on smoking, alcohol, diet, physical activity, accidents and general health. SLÁN was repeated in the summer of 2002. The results, due in April / May 2003, will provide information on the trends in health behaviour relevant to risk of heart disease since the launch of the Cardiovascular

Health Strategy. The findings will provide valuable information for planning and evaluation of health promotion interventions.

At the beginning of the implementation process health promotion was targeted for funding and the resources of regional health promotion departments were substantially increased. In the first three years an additional 139 health promotion staff were employed as set out in Chapter 3, section 3.8. While the measurement of success and impact of health promotion will only be seen in the long term, service developments are summarised in this review.

Most health boards have integrated heart health promotion with other health promotion services across a range of settings, topics and population groups. The Mid-Western Health Board has developed its health promotion service by delivering settings-based programmes through heart health teams in each of the four local authority areas in the region.

In late 2001 the Northern Area Health Board (NAHB) drafted a consultation document for the strategic development of health promotion services, recognising the need to re-orient health services to ensure a balance between health promotion and service delivery. Matters such as barriers to making healthier choices and resources to combat lifestyle-related diseases were considered by presentations and focus groups during three one-day seminars. These discussions supported 79 managers to incorporate health promotion into the board's service delivery plans. Other boards operate a similar approach to the NAHB. For example, the Western Health Board has allocated specific funding to each service area to integrate health promotion into service delivery.

4.3 Intersectoral Working

The Cardiovascular Health Strategy supported recommendations in previous health strategies that all government departments and other state agencies and voluntary organisations should collaborate to promote health. *The Health Promotion Strategy 2000 to 2005* launched in July 2000 and the National Health Strategy *Quality and Fairness* launched in November 2001 place a high priority on multisectoral collaboration for health.

The Heart Health Task Force involves government departments with a role in 'making the healthier choice the easier choice' through their responsibilities for the physical, social and economic environment. The Heart Health Task Force will collaborate with structures put in place to implement the proposed population health actions of *Quality and Fairness*.

Assessment of the health impact of planning decisions related to housing, transport and leisure facilities as well as access to safe and sufficient footpaths and leisure facilities are recommended in the Cardiovascular Health Strategy (R5.5 and R5.45). These recommendations aim to ensure that facilities are readily available for health-enhancing physical activity. While implementation at local level is a matter for local authorities, the Department of the Environment and Local Government has highlighted that the planning system does take account of health issues. In particular the Planning and Development Act, 2000 provides that in future all local authority development plans must include objectives for:

- the integration of the planning and sustainable development functions with the social, community and cultural requirements of the area and its population; such requirements could include the provision of safe and accessible footpaths and cycle paths,
- the preservation, improvement and extension of recreational amenities which could include playing fields, sports centres, etc., and
- facilitating the provision and sitting of services and facilities necessary for the community, including recreational facilities and open spaces.

There are examples of the policies of state agencies taking account of health concerns. In line with recommendation R5.25, the Irish Sports Council has contacted all national governing sports bodies and assured them of the Council's support in their efforts to curb smoking by spectators during sporting events.

Government agencies and health boards work in partnership in the development and delivery of health

promotion initiatives and services, not just with each other but also with a wide variety of community and voluntary organisations. Many partnerships have been developed and strengthened through the implementation of the Cardiovascular Health Strategy with potential long-term benefits for the health of the population. While the detail of projects is covered later in this chapter, examples of strengthened intersectoral collaboration in the implementation of the Strategy include:

- health promotion initiatives in the workplace, community and schools,
- smoking cessation initiatives,
- physical activity initiatives,
- GP exercise referral in the Southern Health Board and the Mid-Western Health Board, and
- the Disadvantaged Area Scheme led by the Irish Sports Council.

4.4 National Awareness Campaign – Ireland needs a Change of Heart

Recommendation R5.7 of the Cardiovascular Health Strategy refers to the integration of national and regional programmes for maximum effectiveness. To provide a platform for this, a major advertising and information campaign was planned to increase public awareness of the risk factors associated with heart disease. A mass media campaign was developed to address the entire community but with particular emphasis on social classes 5 and 6 (those with the lowest levels of education, skills and material resources). The main aims of the *Ireland needs a Change of Heart* campaign are:

- to raise public awareness of the comparatively high rates of heart disease in Ireland and of the lifestyle factors which increase risk of cardiovascular disease, i.e. smoking, diet and raised blood cholesterol, raised blood pressure and physical inactivity, and
- to raise public awareness of a national five-year programme to reduce the incidence of heart disease in Ireland.

i. Phase One

Phase one, launched on 20 September 2000, was the six week launch phase and involved producing and placing advertising on television and radio as well as outdoor posters. This phase ran from World Heart Day, 24 September 2000, to the end of Irish Heart Week, 6 November 2000. A 16 page *Handy Guide to a Healthy Heart* was produced and distributed to every household in the country during October / November 2000. The Guide gave practical advice to convince the public that they can, either on their own or with help, improve their heart health through their lifestyle. A *media and influentials pack* was circulated to about one thousand key people in a position to influence people's lifestyle and health behaviours.

Health boards and health service providers played a crucial role in supporting the national campaign. Regional committees were established in each board and developed health promotion initiatives to link with the national advertising messages.

ii. Phase Two

In 1994 a World Health Organization position statement recognised physical inactivity as an independent risk factor for coronary heart disease. Six out of ten Irish people do not take enough activity for health benefits, i.e. they do not accumulate at least 30 minutes of moderate intensity physical activity most days of the week.

4

Over a number of years the Health Promotion Unit of the Department of Health and Children had undertaken national and regional campaigns to address smoking and healthy eating. Therefore, and in recognition of the risk of heart disease to the physically inactive population, it was agreed that phase two of *Ireland needs a Change of Heart* should concentrate on physical activity.

As part of the Good Friday Agreement a number of key areas were identified for cross-border initiatives, including health promotion. In April 2001, the Department of Health and Children agreed to work in collaboration with the Health Promotion Agency of Northern Ireland (HPANI) on the second phase of the *Ireland needs a Change of Heart* campaign and a partnership on physical activity was established.

This phase of the campaign called *get a life, get active* was formally launched in Dublin on 23 May 2001 by the two Ministers, Mr. Micheál Martin, T.D., Minister for Health and Children in the Republic, and Ms. Bairbre de Brún, M.L.A., Minister of Health, Social Services and Public Safety in Northern Ireland. In 2002 the programme placed particular emphasis on walking as a form of physical activity which is feasible for most people.

The campaign in the Republic of Ireland ran over eighteen months from May 2001 to October 2002 and included:

- eighteen weeks of national and regional advertising on television and radio,
- publication and distribution of 1.2 million 20 page *Handy Guide to Physical Activity*; 600,000 of these were delivered to households in areas identified as economically disadvantaged,
- publication and distribution of over 300,000 physical activity leaflets on an all island basis, and
- publication and distribution of 500,000 walking leaflets.

Through a network of health board physical activity co-ordinators the seven regional health boards and the three area boards in the ERHA developed and ran a programme of activities to support the campaign, focusing in particular on schools, workplaces and older people. A number of organisations also supported the campaign, in particular the Irish Heart Foundation, as well as Age and Opportunity, the Irish Sports Council, Department of Sport Science and Health in Dublin City University, and the Diabetes Federation of Ireland.

iii. Impact of Ireland needs a Change of Heart

Six pieces of communications research were carried out to support *Ireland needs a Change of Heart*. Prior to the commencement of the campaign the population's general understanding of heart health was:

- that there is highest awareness of smoking (59% spontaneous) as a risk factor, followed by a belief that stress and lack of exercise increase risk
- a good awareness of physical activity recommendations, and
- a perception that Ireland has a worse rate of heart disease than the rest of Europe.

Further research in November 2002 following both phases of the campaign showed that:

- smoking is still the most commonly cited risk factor (61% spontaneous) followed by lack of exercise, being overweight, stress and diet,
- the majority of people are aware of measures they can take to reduce their risk of heart disease. There is an age differential in that people under 50 years are more aware of lifestyle choices such as diet, smoking and being active, and people over 50 years are more aware of having regular checks on blood pressure and cholesterol,
- 50% recall of *get a life, get active*; 40% recall of I*reland needs a Change of Heart*, and
- those who say they have read the booklets have a greater knowledge of the recommended lifestyle choices for health gain.

The recall of the campaign materials and messages indicates that they have had an impact in improving knowledge and raising awareness of heart health and of physical activity in the population.

4.5 Smoking

It has been estimated that there are 7 000 smoking-related deaths in Ireland each year - most of which are preventable. The largest number of these deaths is attributed to cardiovascular disease. The Cardiovascular Health Strategy recognises that a multi-faceted approach is needed to reduce the prevalence of smoking, including fiscal, legislative and education measures.

i. Fiscal Measures

Recommendation R5.22 of the Strategy refers to the removal of tobacco from the Consumer Price Index (CPI), that the annual increase in the price of tobacco should be substantially above inflation and that additional tax collected from tobacco sales should be used for national health education initiatives.

The Chair of the Heart Health Task Force has each year forwarded a pre-budget submission to the Minister for Finance on behalf of the Task Force. These submissions outlined the views of the Task Force that as tobacco consumption among young people is price-sensitive, every effort should be made to raise the price of tobacco in line with the 63.5 cent (50p) increase in 1999. In addition, the Minister has been encouraged to remove tobacco forthwith from the list of items in the CPI in accordance with recommendation R5.22(1).

Increases in excise duties on a packet of 20 cigarettes have been as follows in recent years:

- 63.5 cent from 1 December 1999
- 3.9 cent from 31 December 2000
- 12.7 cent from 5 December 2001
- 50.0 cent from 4 December 2002

Therefore about one quarter of the price of cigarettes at the end of 2002 can be attributed to the 30% increase in the price of cigarettes from increases in excise duties since 1999. The Central Statistics Office publishes the CPI on a monthly basis, including a CPI excluding tobacco. The CPI excluding tobacco increased by 4.6% in 2002, identical to the overall rate of inflation for the Irish economy in 2002 which was also 4.6%.

ii. Legislation

Recommendations R5.21 and R5.26 of the Cardiovascular Health Strategy refer to legislative controls on tobacco.

On 27 March 2002 the President signed the Public Health (Tobacco) Act, 2002. The Act provides a more comprehensive and strengthened legislative basis for regulating and controlling the sale, marketing and smoking of tobacco products and for enforcing such controls compared to previous legislation, including:

- a prohibition on the sale of tobacco products to persons under 18 years of age,
- a prohibition on the sale of tobacco product by means of self-service (with a derogation for tobacco vending machines in licensed premises),
- a provision whereby the Minister can prohibit or restrict smoking in specified places,
- a comprehensive ban on tobacco advertising (with limited exceptions) and on all forms of sponsorship by the tobacco industry, and
- prohibition of certain marketing practices, including
  - the sale of cigarettes in packets of less than 20 cigarettes,
  - the manufacture, supply or sale of oral smokeless tobacco products,
  - the sale of confectioneries normally intended for children which resemble a tobacco product,
  - the sale or supply of tobacco products which do

not bear a health warning, and
- the prohibition of certain claims in relation to tobacco products.

Part 2 of the Act has been implemented with the establishment of the Office of Tobacco Control on a statutory basis with effect from 31 May 2002. The general function of the Office includes:

- promoting a tobacco-free society in accordance with the Government's policy document *Towards a Tobacco Free Society,*
- advising and assisting the Minister on tobacco control measures, including the control and regulation of the manufacture, sale, marketing and smoking of tobacco products,
- monitoring and co-ordinating the implementation of such measures, and
- the office may appoint authorised officers with a range of powers to enforce tobacco control legislation.

Part 2 of the Act also provides for the establishment of the Tobacco Free Council that will be established by the Office. This Council will be a non-executive advisory / consultative body which will include persons from various sectors who have influence on public opinion, especially on children. Such a Council was called for by Cardiovascular Health Strategy recommendation R5.28.

iii. Education

a. National Campaigns

The national ongoing *Break the Habit* campaign targets the whole population to encourage smokers to stop smoking and non-smokers not to start. To support the positive approach to stopping smoking adopted by the *Break the Habit* campaign, advertisements provide information on an advice kit and on a quitline run by the Irish Cancer Society, offering the smoker a clearly set out, methodical plan and personal support to assist them to stop smoking. These services have had good uptake by smokers and are also offered as supports by health promotion professionals.

The advertising awareness and impact levels for the *Break the Habit* messages achieved unprecedented scores amongst the smoking population. Market research on these advertisements found that:

- 96% of smokers believe the messages are 'very easy to understand',
- 80% of smokers identify with the messages, and
- 42% of smokers who availed of it found the quitline was helpful.

The Heart Health Task Force recognised the widespread concern about smoking by teenage girls and young women given that:

- almost half of Irish children have tried a cigarette,
- by the age of 15 years more girls smoke than boys,
- 80% of all smokers become addicted by 16 years of age,
- girls are less likely to quit when they are addicted,
- by the age of 15 to 17 years one third of all boys and girls are smoking between 3 and 6 cigarettes a day,
- by the age of 17, 40% of girls (28% of boys) from low income backgrounds are smokers, and
- 50% of today's young smokers will die prematurely from smoking-related diseases.

A special component of the *Break the Habit* campaign in 2000 targeted teenage girls, partly funded by the Strategy. The campaign called *NICO*, focuses on issues relevant to young women, such as their appearance. The message of the campaign is that smokers are less attractive and it uses a range of 'anti-cosmetics' presented by a character called *NICO*. The campaign uses television, radio and outdoor advertising. In May 2001, the *NICO* campaign received the highest accolades with awards in television, radio and press categories of the British Health Awards (Golden Apples). There is a 60% spontaneous awareness of the *NICO* message among adult smokers.

b. Regional Initiatives

Each health board has established a smoking action group to co-ordinate tobacco health promotion. All boards have expanded their tobacco health promotion services and twenty-six additional community smoking cessation officers have been recruited in the first three years of the Cardiovascular Health Strategy.

Smoking cessation services have been developed by most boards, with smoking cessation officers and 'Smoke Free' co-ordinators offering support to individuals and groups, as well as providing advice regarding smoking policies and legislation. Support for smoke-free workplace policies has received particular attention at regional level. A large volume of 'Skills for Change' training has been completed with health care providers and awareness raising seminars, on the prevalence of smoking and on measures to combat tobacco, have been held with community groups. Examples of regional initiatives include:

- In the Eastern Regional Health Authority a smoking cessation facilitator's forum was established to discuss how best to provide support to people in the region who want to quit. The quarterly forum maps the current situation with regard to smoking cessation services, shares information and experiences and identifies the needs of smoking cessation facilitators. To date over 50 smoking cessation facilitators have attended at least one meeting of the forum.
- In the Midland Health Board the smoking cessation service has achieved a 15% quit rate for participants during the first three months of the service.
- In the Mid-Western Health Board five additional stop-smoking support groups have been established.
- The North Western Health Board trained post-primary teachers as smoking cessation leaders.
- In the Western Health Board the smoking cessation service started in May 2002. A referral system was established for clinical units within University College Hospital Galway and in its first five months 122 clients availed of the service.
- In the South Eastern Health Board the smoking cessation services developed under the Strategy have had contact with 670 people.

There is scope for other boards to learn from the following initiatives:

- The Western Health Board implemented 'You Quit We Pay' whereby two pharmacists near to University College Hospital Galway offered a 20% reduction in the price of NRT to hospital staff, subsidised by the health board. Sixty people participated and 26% successfully quit after six months.
- In the South Eastern Health Board 40 midwives have been trained to support smoking cessation during pregnancy and to encourage the avoidance of smoking in the presence of babies and children. The Mid-Western Health Board has undertaken a similar initiative.

Smoke Free Carlow

The Smoke Free Carlow Project, a five-year smoking prevention and education programme in schools, was initiated by the Health Promotion Department of the South Eastern Health Board.

Aims

The aims are to:

- delay and prevent the onset of smoking amongst young people in Co Carlow,
- provide support for adults who wish to quit smoking, and
- encourage participation in active healthy lifestyles.

Progress

The project commenced with the fourth class pupils of 1999 and will continue with them until they have completed second year at post-primary level. Continuing the project from primary to post-primary level incorporates Smoke Free Teens into this critical transition stage.

The work carried out during the second and third year of the project was a development from the school and community groundwork done in year one. This included supporting teachers in their delivery of the project and motivating the children to maintain the high level of interest established during that first year. A number of initiatives were undertaken to actively engage parents in the project and the local media were involved in

highlighting the smoke free messages to the wider community. Volunteers were trained to support those who wished to stop smoking and smoking-cessation courses were run in towns around the County.

Evaluation

An interim survey of school pupils was carried out in December 2000, with the following results:

- **Levels of smoking**
  When asked if they had tried smoking 'even just one puff' 29% (165 children) of pupils reported that they had. However only 4% reported continuing to smoke sometimes.
- **Attitudes towards smoking**
  The vast majority of respondents believed that smoking did not make you feel confident, make you look cool or grown-up.
- **Knowledge regarding effects of smoking**
  96% of the children agreed that smoking is bad for your health and as many as 90% of them agreed that breathing other people's smoke is also bad for health. This shows an increase since the baseline survey of 5% for boys and 6% for girls in awareness of the effects of passive smoking. Respondents who agreed that smoking is bad for your health were less likely to smoke.

4.6 Diet and Nutrition

i. National Initiatives

The Health Promotion Unit has run the National Healthy Eating Campaign for the past ten years. The campaign has focussed public attention on healthy eating, with 60% awareness of key nutrition messages. The campaign's 'food pyramid' is now widely recognised as illustrating national advice on healthy eating and there is increased public awareness of guidelines on fruit, vegetables and fibre consumption, low fat eating and being a healthy weight.

Since 1999 the focus of the National Healthy Eating Campaign has been on reducing fat intake and the consumption of more fruit and vegetables. These are key healthy eating messages for the prevention of cardiovascular disease. Research in 2001 indicated 60% awareness of the campaign and 30% of those who were aware were influenced to change their eating habits. In 2001 / 2002 the emphasis was specifically on heart health and aimed to raise awareness among women in particular.

Restaurants, hotels, pubs and coffee shops participate in the national Happy Heart Eat Out programme which is part of the National Healthy Eating Campaign and is co-ordinated by the Irish Heart Foundation. This encourages eating establishments to provide healthy food choices during the month of June. In its tenth year, the programme involves up to 500 establishments across the country. Since the launch of the Strategy this programme has emphasised heart health messages.

For ten years the Health Promotion Unit (HPU) has been working with An Bord Glas to promote increased consumption of fruit and vegetables and in 2002 the HPU held discussions with An Bord Iaschaigh Mhara in relation to promoting fish consumption (R5.36). An Bord Glas continues to develop its promotion of fruit and vegetables. Acting on its behalf, the University of Wales in Bangor piloted the Food Dude Programme in schools, aiming to increase awareness among young people of the benefits of eating fruit and vegetables.

The Health Promotion Unit in conjunction with the Irish Nutrition and Dietetic Institute, the Health Promoting Hospitals Network and the Irish Heart Foundation are drawing up a series of guidelines and assessment tools on:

- healthy catering guidelines and an assessment tool for staff and visitors in health institutions,
- minimum nutrition standards for patients in acute hospitals,
- Food and nutrition guidelines for primary schools, and
- Food and nutrition guidelines for pre-schools.

ii. Regional Initiatives

Thirty-six additional community dietitians have been recruited. These have formed partnerships with community groups to provide nutrition education, cookery programmes and healthy eating projects. A number of boards appointed dietitians whose main role is to provide staff training and patient counselling services as well as supporting health promotion initiatives.

The majority of health boards have been resourced to run targeted, focused, sustained programmes aimed in particular at those on low-incomes. Programme examples include *Healthy Food Made Easy*, a peer lead healthy eating initiative, and *Cook It*. Both courses are aimed at increasing nutrition knowledge and developing practical cooking skills to facilitate healthy food choices.

Innovative programmes include the fruit and vegetable co-op and community café in the Mid Western Health Board. The Western Health Board ran a Children's Healthy Eating Calendar art competition and in the North West the *Eat Well Be Well* programme was expanded in Sligo / Leitrim. The North Western Health Board developed nutrition guidelines for primary schools and these are now being used as a template to develop guidelines at national level.

Since the launch of the Strategy some of the functions of the Food Safety Authority of Ireland have been transferred to the Food Safety Promotion Board (FSPB). The FSPB is considering the establishment of a Food and Nutrition Forum to facilitate communication about nutrition between relevant agencies (R5.30).

Southill Food Co-op - MWHB

Objectives

- To study knowledge, attitudes and behaviour of low-income groups toward fruit and vegetables.
- To explore the use of the Food Co-op to encourage low -income groups to cook and eat more fruit and vegetables.
- To re-evaluate fruit and vegetable purchase and consumption following the pilot phase of the Co-op.

The stakeholders formed a management committee and the Co-op, based in Southill House, started to operate on one day every second week, without formal membership and on a non-profit making basis. Responsibility for running the Co-op was delegated to four staff drawn from a community employment scheme. Two staff were trained in book-keeping and two applied for mini-bus driving licences.

Outcome

Demand for the Food Co-op from the community is enough to sustain the operation on a weekly basis. Since the Co-op was set up in January 2001 people use it consistently and in increasing numbers. Residents appreciate the reduced cost and better quality of goods at the Food Co-op and are aware that their intake of fruit and vegetables has improved. After the establishment of the Co-op there was an increase in knowledge about recommended amounts of fruit and vegetable intake and more frequent purchasing of increased quantities of fresh fruits and vegetables were recorded.

Healthy Eating Guidelines for Primary Schools - NWHB (being adopted nationally)

Aim and Objectives

The overall aim is to have a healthy eating policy operational in primary schools in the North West. Key objectives are:

- that schools wishing to develop a healthy eating policy, would be supported to do so,
- that teachers, parents and children have accurate, up-to-date information on what constitutes a healthy diet, and
- that the frequency of foods high in fat, salt and/or sugar consumed by children during the school day is reduced.

Progress

- 20 schools piloted the programme in 2001-2002.
- The programme is being extended to a further 20 schools in 2003. Although the demand from schools is much higher (70 schools have requested to join the programme) this is a realistic number in terms of what can be supported.
- Support includes visits to each school by a health promotion officer to assist in implementing the policy.
- A dietitian or *Eat Well Be Well* tutor addresses parents and provides materials.

Benefits

- A resource pack contains guidelines on policy development and a wall planner, accompanying work cards and a home link activity; flyers for parents and bookmarks for the children have been developed, and
- 16 nutrition education lesson plans have been developed and delivered in the pilot schools (2 lessons per class for each class in the primary school).

4.7 Overweight

The Community Dietetic services provide advice and counselling to people who are overweight or obese. These services have increasing linkages with general practice as well as with public health nurses and other community based health professionals.

In the South Eastern Health Board 86 general and public health nurses have been trained to support prevention of further weight gain and it has produced a booklet called *How to stop smoking without putting on weight*. In the Midland Health Board 23 professional staff have received similar training.

The Mid-Western Health Board has developed an information pack on obesity for use in primary care and has developed a referral process with GPs in the region.

Addressing overweight requires a multi-faceted approach and one such programme is being run since 2001in the North Western Health Board to target men over thirty years of age.

Men's Healthy Weight Programme - NWHB

Aim

To develop a programme that enables and supports men over thirty to make positive changes in relation to body weight, physical activity and nutrition.

Objectives

- to recruit men into a healthy weight programme,
- to have demonstrable health gains in relation to measured weight, reported eating habits and reported physical activity at the end of the programme and at six months and one year after the programme, and
- to increase self-reported satisfaction in relation to health and well-being among the men.

Programme Activities

- to set targets for individual men on physical activity and diet using food and activity diaries,
- to run an evening for the men and their partners on *Eating for Weight Loss,*
- to run a programme of weekly physical activity,
- to monitor fitness levels, and
- to carry out four-monthly reviews of individual men's progress compared to their initial targets.

Benefits

The benefits have been identified through the four-monthly reviews.

- Weight Loss
  - ten men lost weight with one man remaining the same weight,
  - weight loss varied from one member losing 13 kg to another losing 0.5 kg,
  - average waist circumference was reduced from 96 cm to 92cm, and
  - participants reported enjoyment of being a lighter weight.

- Dietary Changes
  - changes initiated at the beginning of the programme have been maintained, and
  - men expressed that these changes had not been hard to achieve.
- Physical activity changes
  - increased levels of physical activity, and
  - " seeing other men out walking encourages me to keep going".
- Other benefits
  - " learning a lot about myself and how to look after myself", and
  - " finding the group a great support and motivator".

4.8 Physical Activity

The national advertising campaign on physical activity, *get a life, get active*, was described in section 4.4 above.

The health boards' Physical Activity Strategy was reviewed during 2001 / 2002. The implementation of the Strategy required substantial intersectoral working, with the involvement of many statutory and non-statutory bodies in promoting and supporting physical activity. Some key developments since the launch of the Strategy include:

- The implementation of the Irish Sports Council's Strategy *A New Era for Sport*. Twelve local sports partnerships were established around the country, involving a wide variety of agencies from the statutory, voluntary and sporting sectors, including health boards. The overall aim is to increase participation in sport and physical activity and ensure that local resources are used to best effect. Since their establishment in 2001 the local sports partnerships have been developing and agreeing plans for collaboration.

- Health boards have appointed twelve physical activity co-ordinators and structures have been put in place to provide advice and support in a number of settings, including schools, workplaces and communities, targeting in particular the young and older people.

- An all-island conference in November 2002 addressed best practice in promoting physical activity. The conference identified principles of good practice and explored the potential role and contribution of relevant agencies in promoting physical activity. A report on the conference is being completed and follow-up action identified.

- The Strategy has provided additional funding to *Sli na Slainte*. These pathways to health are developed and maintained by the Irish Heart Foundation. The routes encourage people of all ages and abilities to walk for pleasure and good health. About 50 of the 115 routes have been developed since 1999 with Strategy funding. *Sli 2* was launched in 2001. This involves a series of motivational signs specific to each location to promote physical activity throughout the day. In the last two years many physical activity co-ordinators have qualified as trainers of walking leaders to promote these routes in local areas. Nationally there are in excess of 400 people trained as Sli leaders.

- By the end of May 2002, 38 tutors and 171 leaders had been trained to deliver sports and physical activities to older people under the Physical Activity Leaders scheme, organised by Age and Opportunity. All health boards have

trained tutors available to them. Most of the leaders are themselves older people and they deliver programmes within their own communities and groups.

- Resources have been produced to assist older peoples' groups and sports clubs to increase the number of older people participating in sport. They include an information pack on different types of bowling, bowling workshop training and a booklet on organising a local sports fest. All these resources are available from Age & Opportunity.

- In 2002, 400 people attended the National Bowling Expo organised as part of Age and Opportunity's Sports Participation programme. Participants sampled eight different types of bowling activities (ten pin bowling, boccia, petanque, road bowling, curling, horseshoe pitching, indoor bowls and outdoor bowls).

- In 2002, over €300 000 was made available through the Irish Sports Council grant scheme to almost 500 local groups to enable them buy sports equipment, organise training programmes and sports festivals. The main activities identified by the groups were bowling, tai chi, swimming, and walking. Recipients in 2002 included Whitefriar Street Community Education & Development Project in Dublin City, Tallaght Guild ICA in South County Dublin and Summerhill Active Retirement Association in Co. Meath.

Many health boards developed specific programmes to promote physical activity including the North Eastern Health Board's Playground Activities and the Western Health Board's PACE programme.

Playground Activities in the NEHB

Since a proportion of school life is scheduled as 'break time' it is essential that this time is used productively and that children are given the opportunity to fully experience and enjoy the benefits of this unique time to be active.

In 2002, the NEHB piloted a playground games and markings project in five schools in partnership with the Department of Education and Science, local authorities and the Irish Heart Foundation. The schools promote the games through the physical education programme and playground supervision.

The project is currently under evaluation. Nationally a resource pack is being developed for this initiative. The pack will be available to all boards and schools wishing to undertake a similar project.

PACE Programme WHB

Aim

The Personal Assistance in Choosing Exercise (PACE) programme involves counselling people on integrating more physical activity into their daily lives.

The Programme

The PACE programme was developed and evaluated in the USA. The Programme provides a one-to-one counselling session for 30 minutes, followed up 4 to 6 weeks later by a telephone call or a personal visit if necessary. The individual counselling sessions are based on the well-known Stages of Change model.

Benefits

The Western Health Board has provided this service to over 1 000 clients. These represent members of the public from all social backgrounds and members of Board staff across all grades. A survey of a representative sample of these clients showed that:

- 46% of participants moved from the contemplation stage to the action stage in the behaviour change process,
- 50% were fitter compared to baseline,
- 45% had reduced their percentage of body fat, and
- in addition, clients like the concept of self-referral and appreciated the individual attention.

4.9 GP Exercise Referral

It is now well documented that regular physical activity helps protect against cardiovascular diseases and obesity. Exercise 'referral programmes' have been in place in the United Kingdom since the 1960s. The concept is for low-risk patients to be referred by their general practitioner (GP) to an exercise co-ordinator for advice and a programme of exercise appropriate to their condition. Under the Cardiovascular Health Strategy, the Southern and Mid Western Health Boards developed and implemented a GP Exercise Referral Scheme in their regions.

In October 2002 the Minister for Health and Children launched a *National Framework for Developing General Practice Exercise Referral in Ireland*. This framework was developed by a Working Group chaired by the Department of Health and Children and comprised of representatives from the Department of Health and Children, Institute of Leisure and Amenity Management Ireland, health boards, the Irish College of General Practitioners and the Education and Sports Science Association of Ireland.

The Minister for Health and Children endorsed the establishment of a National Steering Committee during 2003 to oversee all aspects of developing GP exercise referral in Ireland including:

- the development of the programme and related course materials,
- the delivery of the programme and the related training course, ensuring availability on a nationwide basis,
- agreement on criteria for the selection and monitoring of leisure facilities to the programme,
- advise on the allocation of available resources towards the development of the programme, and
- evaluation of the programme at the end of the first year.

Mid Western and Southern Health Boards GP Exercise Referral Pilot Projects

In the Southern Health Board, nine general practitioners were recruited. Participants joined at any time and completed a twelve-week programme assisted by an exercise co-ordinator who was based at a leisure centre. The agreed exercise programme was either leisure centre, home and/or community based depending on the participant's circumstances. The programme included people aged from 18 years to 84 years.

Each participant in the Mid-Western Health Board pilot project completed a 9 month programme with assessments at four time points (baseline, 3 months, 6 months and 9 months). Participants were aged between 30 and 50 years. Eight general practitioners were initially recruited which increased during the pilot to ten. Both community owned and private centres were invited to participate (three community centres and one private leisure centre were used for the programme). Both home and leisure centre based programmes were provided, with interventions tailored to individual needs based on behaviour change strategies.

The 177 participants in the pilot schemes were monitored and their progress was evaluated throughout the course of the programme. The evaluations measured activity levels and qualitative measurement of participant's mental health benefits from being more active. Results found increased activity levels, positive changes in attitude and perception of physical activity, and improvement in participants' perception of their own mental, physical and general health and vitality. Participants believed that there were improvements in other health behaviours and reported that they would continue with their exercise programme after the course finished.

In the MWHB

This pilot measured people's progress through the Stages of Change model:

- baseline to three months represented the time frame of greatest progressive stage movement with 75% of the group progressing 1 or 2 stages, and
- total physical activity increased across the assessment points with the greatest change observed from baseline to 3 months (12% increase) and 3 to 6 months (8%) periods. Increases in the 6 to 9 month period were smaller (2% rise).

In the SHB

- 96% of participants rated the programme in general as good or very good,
- 93% reported enjoying the GP Exercise Referral Scheme greatly or moderately, because of individual attention (35%) and the opportunity to socialise (35%),
- 87% reported having benefited greatly or moderately as a result of the programme,
- 95% claimed that they would continue to exercise as they had been shown during the scheme,
- mean alcohol consumption was reduced after the programme although smoking status remained unchanged, and
- 80% of GPs reported noticing an appreciable change in their patients' overall well-being after participation in the programme.

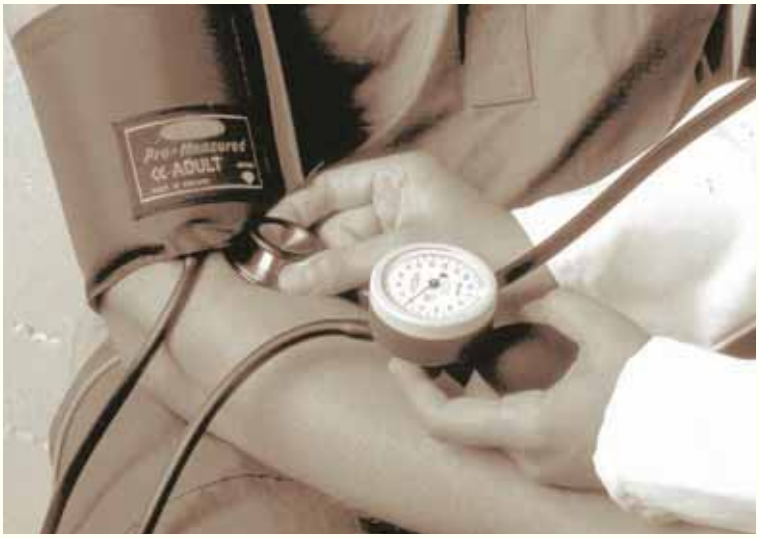
4.10 Alcohol

The overall aim of the National Alcohol Policy (1996) is to reduce the level of alcohol related problems and to promote moderation by those who choose to drink. Since the publication of the policy, several programmes have been expanded or developed utilising the health promoting settings approach in schools, the informal youth sector, colleges and primary care as follows:

- A three-year alcohol awareness campaign (2000-2003) *LESS IS MORE* involves a number of elements including awareness raising of alcohol issues and development of advertising campaigns (targeted at binge drinkers and access to alcohol for minors) as a backdrop to the implementation of initiatives in different settings. Pilot projects are taking place in community and workplace settings which will be expanded during 2003.
- Research on the economic costs of alcohol problems, the impact of alcohol advertising on young people, alcohol consumption as part of lifestyle surveys, a primary care project and a national emergency room study on alcohol and injuries.
- Training programmes for youth workers, teachers, GPs and bar staff.

In parallel with the education and awareness raising programmes there has been increased enforcement of drink driving laws and enforcement of the new Intoxicating Liquor Act 2000 of Temporary Closure Orders for those who sell alcohol to minors.

The Strategic Task Force on Alcohol (STFA) was set up by the Minister for Health and Children and started work in January 2002. Its terms of reference include recommending effective measures, based on sound science, to prevent and reduce alcohol related harm in Ireland. The Task Force has published an interim report that included the following recommendations:



- increased taxes on alcohol, maintenance of licensing measures restricting availability and allowing health boards to object to licence renewal where public health problems are evident,
- random breath testing and lowering of permitted driver blood alcohol level to 50 mg per 100 ml to reduce alcohol related road injuries,
- enforcement of the law that prohibits the serving of alcohol to intoxicated customers and restriction of sales promotions that encourage high-risk drinking, and
- protection of children by limiting advertising, banning sponsorship of underage activities and limiting time when children are allowed in pubs.

Recent research indicates that a high proportion of acute alcohol problems are associated with drinking too much per drinking session and not to the total weekly consumption. Therefore the primary focus is to reduce harmful consumption on any single drinking occasion. New targets will be developed while continuing to recognise that total weekly consumption is also a useful marker of chronic high-risk drinking. A review of the national alcohol policy is under way and a new action plan is committed as part of the Health Strategy implementation. There is also a commitment in *Quality and Fairness* to examine further restrictions on the advertising of alcohol.

4.11 Blood Pressure

Awareness of raised blood pressure as a risk factor for cardiovascular diseases formed part of Phase I of *Ireland needs a Change of Heart*. Funded by the Health Promotion Unit, the Irish Heart Foundation provides materials for the general public on blood pressure.

Under the *Heartwatch* programme (see Chapter 5, section 5.2), patients with raised blood pressure will be offered advice on its management.

While not directly related to health promotion, research has been commissioned with Strategy funding to address raised blood pressure. This recognises that many of those with raised blood pressure do not receive optimum monitoring and intervention. The research involves the development and evaluation of a generic audit tool for the management of hypertension in general practice in Ireland. The outcome will inform future strategies to address raised blood pressure and other factors that increase risk of CHD in Ireland.

4.12 Workplace

A number of workplace health promotion initiatives were planned in the *National Health Promotion Strategy 2000-2005*. To support these developments, the Health Promotion Unit in 2002 established a network for workplace health promotion. This forum has representatives from health boards, other statutory bodies, non-statutory agencies and social partners. Information is exchanged on the implementation and evaluation of workplace health promotion programmes.

Health promotion in the workplace has expanded considerably in recent years and a workplace co-ordinator has now been appointed in all health boards, in the main

from Cardiovascular Health Strategy funding. The workplace co-ordinator is responsible for the development of plans for workplace health promotion and the initiation of pilot projects at regional level.

The Irish Congress of Trade Unions published a 32 page booklet in 2001 on workplace stress for workers and union representatives. This includes guidelines on stress reduction and healthier lifestyles.

Workplace health promotion has taken place across both health and non-health care settings.

i. Healthcare Setting

Most health boards have implemented a number of programmes and initiatives for staff health promotion, to promote a workplace environment which 'makes the healthier choice the easier choice', to improve health behaviour in the workforce and, overall, to support physical and mental health and well-being in health service staff. Examples of these initiatives include:

- The Department of Health and Children has installed *Slí 2* signage to promote walking as a safe, accessible form of physical activity. There is a focus on men's health, involving consultation and an ongoing series of seminars. Healthy eating is encouraged in the department's canteen and support is provided to assist smokers to quit.
- In the North Eastern Health Board a number of staff gyms have been opened. These are free of charge and there has been a good response from staff.
- *Slí 2* signage is located in many of the East Coast Area Health Board (ECAHB) workplace locations. A directory of leisure clubs and facilities in the area was developed for employees, with information available on the intranet. Arrangements have been made with some local leisure clubs to offer membership at a discount to ECAHB staff members.

Health Board Workplace Initiative - Midland Health Board

The Midland Health Board Workplace Health Promotion Project was established in July 1999. It is a three-year pilot project, and is based on needs assessment and evidence of good practice in the health service workplace.

Aim

The aim of the project is to promote increased levels of physical activity and to reduce stress among health care employees in the Midland Health Board.

Objectives

Objectives in relation to physical activity are to:

- promote the health benefits of physical activity,
- create an interest and desire among sedentary employees to participate in physical activity and to adhere to an active lifestyle in the long-term,
- provide accurate and up to date information about health-enhancing activity to all members of staff, and
- provide on-site opportunities for members of staff to participate in physical activity.

The objectives of the mental health promotion programme are based on the three approaches to stress reduction in the workplace to:

- deliver stress management education materials to all employees,
- pilot a primary stress prevention programme in five sites throughout the MHB, and
- support planning of an employee assistance programme for mental health using a needs assessment (secondary and tertiary prevention).

Activities

The project involves:

- A partnership approach with Midland Health Board staff. All activities are planned in partnership with the Regional Action Group for the project. This group represents management and staff from across the region, including 22 health service locations.

- A structured health promotion planning model was used to map and plan the project.
- Major components of the needs assessment were completed.
- The most successful exercise classes have been Yoga with over 300 staff attending classes throughout the region.
- The project has adopted a "hands-on" approach. There has been an emphasis on learning through doing, with evaluation and consolidation of activities on an ongoing basis. Self-completion evaluation sheets have been used to elicit staff satisfaction with components of the programme, such as the walking project, aerobic / yoga classes, stress management classes and the primary stress prevention programme.

In addition to the above, 200 staff participated in brief intervention sessions aimed at weight management. These sessions inform staff about recommendations on physical activity and offer one to one advice on their current physical activity levels. Advice is also provided on weight management and motivation for behaviour change is explored. Participants' initial feedback from questionnaires is that this approach has been well received. Participants will be followed up in Spring 2003.

ii. Settings Outside the Health Sector

Outside of the health service setting, a number of partnerships for workplace health promotion have been established.

The Irish Heart Foundation works closely with the Construction Workers Health Trust (CWHT) to address health and lifestyle issues for construction workers. To date, over 10 000 construction workers have availed of heart health assessments and the IHF works with the CWHT to reduce levels of risk factors.

In the Southern Health Board (SHB) useful information has been obtained from a project with two groups of workers: a catering company, with predominantly female employees and a Cork Corporation group which is predominantly male. The research identified many perceived barriers to adopting heart healthy behaviours, both inside and outside of the workplace. The level of risk of each group in relation to diet, physical activity, smoking and alcohol was assessed and the reasons that health information and disease prevention services are not accessed were explored. The SHB is developing a heart health programme in association with both groups, based on the findings.

The main resource to workplace health promotion since 1992 has been the Irish Heart Foundation's *Happy Heart at Work* initiative. The North Western Health Board and the Western Health Board have worked in partnership to develop workplace health promotion.

Happy Heart at Work - Irish Heart Foundation

Over 650 companies with 350 000 employees are registered with *Happy Heart at Work*.

Aim

Happy Heart at Work aims to help employers provide a work environment which makes the healthier choice the easier choice and to support employees in choosing and maintaining the healthier behaviours.

Programme Components

There are four components to the programme, all of which provide support and advice to employers as well as information and resources for employees:

- healthy eating and healthy catering practices,
- physical activity module,
- smoking control policy and cessation, and
- personal stress handling.

The healthy eating module is the most popular and is certified by an award that is valid for two years. This programme links to the annual National Healthy Eating Campaign and to date over 200 companies, hospitals and

financial institutions have received the award. In association with the North Eastern Health Board and Midland Health Board, companies in these regions may also qualify for the Happy Heart Catering Award certifying not just healthy food choices, but also compliance with smoking and food hygiene legislation.

An independent evaluation by National University of Ireland in Galway 2000 showed that the programme was flexible, provided attractive materials with professional support and offered value for money. In line with recommendations in this evaluation, the Irish Heart Foundation is working closely with several health boards to provide these programmes to health board staff.

Workplace Health Promotion - Partnership between the NWHB and WHB

The Workplace Health Partnership was established in December 2001. The group includes representatives from the health promotion services of the Western and North Western Health Boards, the Occupational Health Nurses Association of Ireland and the Health & Safety Authority.

Aims and Objectives

- To recognise the health promotion needs of all workplaces particularly 'small to medium sized enterprises (SMEs).
- To link with existing organisations and networks.
- To support key players through local partnerships.
- To promote best practice with employers and employees through local interventions.

Outcome

The first initiative by the partnership group was to organise a regional conference in October 2002 to create awareness of workplace health promotion and explore the challenges of furthering this concept in the region. The conference - entitled *Workplace Health, Challenges and Solutions*- was held in Galway during European Health & Safety Week and was attended by 120 representatives, including the Chambers of Commerce, trade unions, government departments, private sector businesses and human resource managers.

Information and evaluation from this conference will guide future developments by the Workplace Health Promotion Partnership.

4.13 Health Promoting Hospitals

Research to assess the factors affecting smoking cessation after discharge from an acute hospital has been commissioned with funding from the Strategy. International studies indicate factors such as diagnosis, gender, age, level of smoking and nicotine dependence, attitudes to smoking cessation and social support can influence success rates after a hospital episode. This research proposal will identify predictive factors in an Irish context and will inform smoking cessation services in the hospital setting in the future.

The Irish National Health Promoting Hospitals Network (HPH) has grown to a total of 64 hospitals. The network is a member of the World Health Organisation's international movement and actively participates in the European Network of Health Promoting Hospitals (HPH). The HPH movement promotes and supports the integration and inter-linking of hospitals with other health promotion approaches.

The HPH network established two initiatives under the Cardiovascular Health Strategy - The National Hospital Survey, and the HPH Pilot Co-ordination Project. Both initiatives are being co-ordinated by the Department of Public Health Medicine and Epidemiology, University College Dublin.

i. National Hospital Survey

The National Hospital Survey aims to describe and quantify health promotion programmes and initiatives available to

staff and patients in the hospital setting. The researcher developed the survey tool, and after a pilot study, data collection and analysis were completed by September 2002. It is intended to publish the survey report in April 2003.

ii. Pilot Co-ordination Project

The Pilot Co-ordination Project aims to compare the pilot hospitals' progress with regard to the implementation of various strategic goals, against that of hospitals without a hospital-based HPH Co-ordinator. Baseline data have been collected in conjunction with the National Hospital Survey.

4.14 Schools

Since the publication of the Strategy in 1999, there have been substantial developments with the introduction and implementation of social and personal health education (SPHE) within the school curriculum.

At Junior Cycle post-primary level, the SPHE Support Service was established in September 2000 and is a partnership between the Departments of Health and Children, and Education and Science, and the health Authority / boards. Eleven regional development officers were seconded from schools across the country to work in partnership with schools health promotion officers in each health board to provide teacher training and school support for the introduction of SPHE. The curriculum guidelines from the National Council for Curriculum and Assessment (NCCA) set out the ten modules for the curriculum within which physical health and substance use are core modules. The guidelines recommend that the curriculum be implemented within a spiral structure, whereby modules are returned to on an annual basis but covering different topics and aspects as appropriate. By September 2003, all post-primary schools should be providing SPHE at Junior Cycle level. The NCCA are currently developing the Senior Cycle curriculum.

At primary school level the principle of a curriculum with a spiral structure also applies and the aim is that the post-primary curriculum will build on the primary foundations. The *Sport for Young People Programme* is being rolled out in primary schools through local sports partnerships. All schools participating in the programme receive equipment bags, resource cards and training for teachers. Through this programme the Irish Sports Council is providing support to teachers to deliver the new primary school physical education programme. Children are provided with a safe, high quality introduction to the motor skills necessary for participation in the majority of sports. This recognises the value of sport in the lives and overall development of young people and its importance as a lifelong physical and social tool.

Likewise, in a cross-border partnership in Donegal / Derry and Sligo / Fermanagh the Irish Sports Council and the Sports Council for Northern Ireland are providing a high quality after- school sports programme to link young people's sporting interest with sports clubs.

With regard to networking and auditing, the following systems are currently in place:

- at post-primary level the SPHE Support Service hosts three two-day events during the academic year to foster the development of regional partnerships and the dissemination of best practice in SPHE in schools,
- the SPHE Support Service also gathers data including on levels of implementation and numbers of teachers trained, and
- the Health Promotion Unit hosts meetings of the School Practitioners Support Network twice yearly. This network was established to support all those working in health promotion in schools to share best practice.

The Irish Heart Foundation Action for Life resource is a guide for teachers to develop physical activity in the school setting. This was enhanced and promoted with funding from the Cardiovascular Health Strategy.

4

4.15 Targeting Disadvantage

Some Cardiovascular Health Strategy recommendations concern the promotion of cardiovascular health and the promotion of healthy diet and lifestyle, specifically focusing on promotion in disadvantaged communities and people on low incomes (recommendations 5.12, 5.14, 5.31, 5.35(6) and 5.35(7).

Given the evidence that people from disadvantaged areas are most at risk of disease, including heart disease, targeting people living in these areas is a priority for health promotion. While many health promotion initiatives pay special attention to groups at higher risk, health boards have also established specific initiatives to focus on these groups. For example,

- most boards have employed community dietitians to work primarily with disadvantaged communities,
- in the Mid-Western Health Board 16 health care workers have been trained as brief intervention trainers and 13 Traveller facilitators have been trained, and
- the Southern Health Board has implemented a project focussing on asylum seekers.

The Department of Social, Community and Family Affairs recognises the strong links between poverty and ill-health generally. It has identified a number of programmes under its remit that have the potential to support the implementation of Cardiovascular Health Strategy recommendations, as follows:

- the Community Development Programme,
- the Family and Community Services Resource Centre Programme,
- the Programme of Core-funding to locally-based Community and Family Groups, and
- the Money Advice and Budgeting Service.

In relation to nutrition, a review of the School Meals Scheme is being completed by the Department of Social, Community and Family Affairs. The Health Promotion Unit, the Department of Social, Community and Family Affairs and the Combat Poverty Agency have completed a review of work that targets disadvantaged people. The Combat Poverty Agency is facilitating further development of plans to improve nutrition in disadvantaged groups.

In the area of physical activity the Irish Sports Council is leading a partnership programme in disadvantaged areas.

Designated Area Scheme by the Irish Sports Council

The Designated Area Scheme is a partnership between the Irish Sports Council and the three largest sports governing bodies, the Football Association of Ireland, the Gaelic Athletic Association and the Irish Rugby Football Union. The scheme was launched in 1999 with the aim of encouraging sport as an alternative to anti-social behaviour in disadvantaged areas. Children involved in the scheme are provided with information on healthy living, covering topics such as nutrition, importance of physical activity and drugs awareness. An evaluation will be carried out at the end of 2003.

The scheme

- targets children that do not participate in sport,
- promotes and maximises the opportunity for participation in sport at local level, through co-ordinating the role of primary schools and community groups,

- establishes a network of local role models such as coaches and leaders to promote increased participation, and
- addresses social inclusion by including anti-drug and anti-crime themes in sports programmes.

Since the scheme's inception in 1999 over 140 primary and secondary schools throughout the country have been involved in a variety of projects. The GAA and FAI schemes focus on developing better links between clubs and local schools. In some cases the clubs have been experiencing difficulties in attracting and retaining new juvenile members. The projects provide quality coaching to children both during school hours and after school. Each project has been encouraged to set up a local management committee comprising of local people and representatives from statutory agencies, including health boards and club members.

As part of their involvement the IRFU is aiming to develop the first rugby club in Tallaght, County Dublin, as a result of the work of rugby development officers. There are 32 schools taking part, with over 1 000 students involved both during school hours and after school. To date, the development officers have concentrated on providing coaching through the school system in order to build up the basic skills among the students. The scheme is available to both boys and girls and the club will aim to field both male and female teams. The next phase of the project will be to support the children to continue to participate through the club system and to encourage adults to also join the club.

4.16 Evidence-based Practice and Evaluation

Health promotion officers who were already in post as well as newly appointed health board staff disseminated information about the Strategy and assessed the implications for training and service development. The focus has been to co-ordinate health promotion in the workplace, school and other settings in relation to heart health, in line with the national health promotion strategy. The importance of evidence-based practice across the range of topics, settings and population groups is recognised by statutory and voluntary agencies to increase the effectiveness of health promotion initiatives and to maximise health gain.

Funding has been allocated to researchers based at the Department of Epidemiology and Public Health Medicine at the Royal College of Surgeons of Ireland for the development of evidence-based guidelines across the range of health services, see Chapter 9 section 9.3. Within that brief, the evidence on interventions to support smoking cessation is being reviewed. The findings will be discussed with smoking cessation officers and form the basis of guidelines for best practice for smoking cessation services.

It is essential that health promotion programmes for heart health are planned using available evidence about effective interventions. This will enable practitioners to audit and evaluate their work against agreed procedures and standards. The Department of Health and Children is in consultation with the National Heart Health Alliance in relation to the development of a set of guidelines for good practice in health promotion based on international and national research and experience.

chapter 5

Primary Care

5.1 Introduction

The key players in primary care include general practitioners (GPs), practice nurses, public health nurses, other community based professionals, local health promotion services and occupational health services. The Cardiovascular Health Strategy Group made 55 recommendations on primary care. Examples of such recommendations include:

- developing the role of the public health nurse in health promotion and disease prevention,
- developing a structured approach to the care of those with chronic cardiovascular disease, including secondary prevention,
- adopting a structured approach in general practice for risk assessment and disease prevention in those identified as being at high risk, and
- developing the role of GPs in pre-hospital care.

The Strategy recommended adoption of the European Society of Cardiology priorities for prevention in clinical practice, with the highest priority being given to those who have already developed symptomatic disease (secondary prevention), followed by those identified as being at high risk. It also recommended that secondary prevention for most patients with cardiovascular disease should be provided in the general practice setting (R.6.21). There should be guidelines for shared care of patients with coronary heart disease between the general practice and hospital settings (R6.22) and a nationally agreed, structured approach to the ongoing care of such patients in general practice (R6.23). Patients should be followed using computerised information systems and specially trained practice nurses should provide much of the counselling and follow-up care of these patients, supported by community dietitians (R6.24).

Following considerable discussion by key stakeholders a protocol was agreed for a secondary prevention programme in general practice.

5

5.2 Heartwatch

Initial Implementation Phase of A National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease

i. Agreement of a National Protocol

The Primary Care Working Group of the Advisory Forum on Cardiovascular Health took a lead role in developing and agreeing a national programme for secondary prevention of cardiovascular disease in general practice. Several meetings were held over a period of about fourteen months involving the Department of Health and Children, the health boards, the Irish College of General Practitioners and the Irish Heart Foundation. In April 2001, the Advisory Forum presented its advice on a protocol to the Department of Health and Children. The Department chaired further meetings to discuss the protocol with stakeholders, including the Irish Medical Organisation and a final agreement was reached in April 2002. The start date for the Initial Implementation Phase of A National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease - *Heartwatch* - was 1 October 2002.

ii. Aim and Objectives

The aim of *Heartwatch* is to implement and evaluate the first phase of a structured programme of secondary prevention of cardiovascular disease in general practice in Ireland.

The objectives are:

- to implement a programme in a sample of general practices for the continuing care, including secondary prevention, of patients who have had a myocardial infarction, coronary intervention or surgery,
- to examine the baseline levels of risk factors and therapeutic interventions relevant to secondary prevention in patients who have had the specified coronary artery events, and their trends over time,
- to examine the processes involved in implementing the programme, including referral patterns and patient retention, and
- to record the incidence of cardiovascular events in patients participating in the programme.

iii. Patient and GP eligibility

During the initial phase of *Heartwatch* about 14 000 patients will be treated by approximately 440 GPs throughout the country. GPs have been invited to participate and were selected in each health board area according to whether or not the practice was computerised, had a practice nurse and met other organisational criteria. All patients (GMS and private) on a participating GP's list with a history of the following are eligible for the first phase and are being invited to join the programme:

- proven myocardial infarction (MI),
- coronary artery bypass graft (CABG), or
- percutaneous transluminal coronary angioplasty (PTCA) or percutaneous coronary intervention (PCI).

Diabetic patients from the Midland Health Board's Diabetic Structured Care Programme are also being included under the *Heartwatch* programme.

iv. The Continuing Care Programme

The programme will be explained to eligible patients and they will be invited to attend the practice four times in the first year. These visits will take longer than the normal consultation. The baseline visit will assess lifestyle factors, including diet, physical activity and smoking, and measure risk factors such as blood pressure, blood cholesterol and body weight. Progress will be reviewed during subsequent visits.

At each visit the patient's stage in the behaviour change process vis-á-vis a heart-healthy lifestyle will be assessed. Arising from this, behaviour change targets will be set for the next review, and motivational and practical information provided in relation to the proposed changes. Medication will be reviewed, including compliance. Patients may be referred for additional investigations or services, either within the practice, to other community based services or to the hospital.

v. Structures to Implement the Initial Phase

Prof. John Feely, Department of Pharmacology and Therapeutics, Trinity College, accepted an invitation by the Minister for Health and Children to chair the National

Steering Committee. Its role is to oversee the initial implementation of the programme, to ensure communication between key stakeholders, to advise on the allocation of resources and to commission an independent evaluation of this initial phase (see **Appendix B**).

In accordance with the agreed protocol, a National Programme Centre has been established, managed by a Programme Director. The Independent Data Centre has also been established. It will collect the data returned by GPs and their practices and distribute aggregated cleaned data sets to relevant agencies, including health boards. Patient and GP confidentiality is secured through the structural and coding arrangements put in place. The work of the Data Centre will be overseen by a Data Management Committee, which will report to the National Steering Committee.

vi. Resources

In 2002 €2.7m was allocated to put the infrastructure for *Heartwatch* in place, including the National Programme Centre and the Independent Data Centre, as well as the recruitment of GP co-ordinators and nurse facilitators in each health board area. Funding was also made available to the Irish Heart Foundation for the production of education materials for *Heartwatch* patients.

vii. Expected Outcomes from the Programme

It is expected there will be considerable benefits for the patients enrolled in *Heartwatch*. Counselling is expected to result in lifestyles that are more heart healthy. It is expected that an increased proportion of patients will reach the internationally agreed targets for risk factors and for the prescription of preventive medications. In addition to reducing risk of a further coronary event, it is expected that the programme will be associated with reduced symptoms and improved quality of life for patients and their families.

A spin-off from the programme is that information will become available on the risk factor profile of patients who have had a coronary event or intervention, and on the management, recurrent events and interventions in these patients.

The National Steering Committee will commission an independent evaluation of *Heartwatch* at the end of the first year of patient care. The continuation and any expansion of the programme will be based on the findings of this evaluation.

5.3 Secondary Prevention Programmes Piloted in the SEHB and the NEHB

Prior to *Heartwatch*, similar programmes were carried out by the North Eastern and South Eastern Health Boards. The local developments have been co-ordinated by the health board primary care units and dietetic, smoking cessation and nursing resources have been put in place to support the projects. The experience and evaluations of these initiatives have greatly assisted the development of the national programme and both projects form part of the national programme from 1 October 2002.

North Eastern Health Board Cardiovascular Primary Care Initiative

The aim of this initiative was to encourage patients with diagnosed coronary heart disease (CHD) to improve their lifestyles, particularly in the areas of diet, exercise and smoking, to monitor and review risk factors, including blood pressure and cholesterol, and to review medications.

The pilot commenced in selected practices on 1 May 2001 and targeted GMS and private patients with a history of AMI, PTCA or CABG. Prerequisites for GP participation included that the practice be computerised and have a practice nurse. In 2001, 43 GPs participated and this increased to 69 GPs in 2002, with about 1 500 patients benefiting.

To develop practice infrastructure for the programme, practices could opt to receive either a 24 hour ambulatory

blood pressure monitor or a machine to measure blood cholesterol. A GP advisor and nurse facilitator provided information to the practices, and there was increased access to dietitian services in the community and to smoking cessation officers in hospitals.

GPs were provided with training in brief interventions through the Smoking Target Action Group, as well as Advanced Cardiac Life Support (ACLS) and cardiac skills training. GPs were given a practice grant in the first year and in the second year paid a fee per visit per patient. Practice nurses received training in health promotion, including a one-day smoking cessation course, Basic Life Support (BLS) and ACLS, and a six-month coronary heart disease prevention course.

A review of patients was conducted every three months based on the European Society of Cardiology Guidelines. In order to provide a seamless service between the hospital and the GP, patients were given a Cardiovascular Care Card that was filled out at each GP / out-patient visit. GPs collected and recorded data on risk factors, lifestyle factors and clinical measurements, including blood pressure, blood lipids, height and weight, and use of evidence-based medications. The recorded data were returned by GPs and were analysed by the Public Health Division of the NEHB.

Benefits

Significant positive changes have been found in modifiable risk factors in the CHD patients participating in this secondary prevention initiative. There has been a reduction in the proportion of patients who smoke as well as in blood lipids and blood pressure levels, with an increase in the numbers of patients taking regular exercise and in those taking evidence-based medications. The improved lifestyles, risk factor and medication prescribing demonstrated in this project can be expected to reduce morbidity and mortality in these patients in the longer term.

South Eastern Health Board Secondary Pilot Prevention Project in Primary Care

With the same aims as the NEHB, the SEHB's pilot project commenced in January 2001. 48 GPs had been recruited across the region, representing 23 practices. They received:

- four hours paid nurse time per week for cardiovascular work,
- one piece of equipment per GP (either a 24 hour ambulatory blood pressure monitor or a 12 lead ECG machine), and
- secretarial grant to help cover administration costs.

GP training in preventive cardiology was facilitated by the Primary Care Unit, the Irish College of General Practitioners and the Irish Heart Foundation. 15 nurses (12 practice nurses and 3 employed by the health board) were also trained in health behaviour counselling and risk factor management for secondary prevention.

The pilot project ran for about 18 months, during which patients attended a practice clinic four times. The GP saw the patient on visit one and visit four. 904 patients were eligible with the following history:

- acute myocardial infarction (MI) 518
- percutaneous transluminal coronary angioplasty (PTCA) 139
- coronary artery bypass grafts (CABG) 247

Four cardiac dietitians were employed regionally with 40% of their time designated to the Secondary Prevention Project. Three health promotion officers with responsibility for smoking cessation were employed regionally, a large proportion of their remit also being to support the project.

The following summarises information on the patients involved and their risk profiles at baseline:

- a total of 698 patients (99.7%) attended for visit one between May 2001 and January 2002,
- of the expected number of 563 patients, 482 attended for visit two,

- 76% of the patients were males and the average age was 66 years,
- at visit one 15% people were identified as diabetic, with 37% of these having a reading in the high risk range,
- 45% of patients had elevated systolic blood pressure,
- 22% had elevated diastolic blood pressure,
- 48% had a raised cholesterol (than 5mmol/l), and
- 49% were overweight and 20% were obese.

Benefits

- practice nurses believed the pilot project was extremely worthwhile in terms of improved patient care, personal development and job satisfaction, and
- the GPs agreed that a major motivating factor for joining the project was a desire to become more involved in preventive care and that there were clear benefits for patients as a result of this pilot project.

5.4 Care of Patients with Diabetes

Building Healthier Hearts recognises that patients with diabetes are at high risk of cardiovascular disease and should be included in a prevention programme similar to non-diabetic patients with diagnosed cardiovascular disease (R6.25). The Strategy also recommends the agreement of protocols for shared care of patients with diabetes between hospital consultants and GPs (R6.26).

A programme for the shared care of patients with diabetes commenced in 2002 in the ECAHB in association with St. Vincent's University Hospital and St. Columcille's Hospital. By September 2002, 9 general practices had registered for this programme with an estimated 329 patients with known diabetes. Patients are reviewed on a regular basis by the GP, diabetes nurse specialist and a specialist dietitian. Many other GPs in the area have expressed an interest in participating in future expansion of this programme.

In 1996 the Midland Health Board introduced a programme of structured of care for patients with diabetes. This has been further developed with Cardiovascular Health Strategy funding. The programme will continue from 2003 as part of the *Heartwatch* programme in the MHB region.

Diabetes Structured Care Programme - MHB

The Midland Health Board Diabetes Programme commenced in 1996 to develop general practice services for patients with diabetes, based on the St. Vincent's Declaration and on best evidence as applied to the Irish health care environment. The programme provides evidence-based medical, nursing, dietetic and chiropody care to diabetic patients in general practice.

Aim and Objectives

The aim of the Diabetes Programme is to offer high quality services in a primary care setting to the diabetic population of Laois, Offaly, Longford and Westmeath.

The objectives are to:

- raise the overall standard of care for people with diabetes,
- document the barriers to implementation,
- develop methods to evaluate the effect of changed care processes on health outcomes for diabetics,
- document the costs of implementing the changes, and
- maximise return per unit cost of resources consumed.

Progress

Support At Practice Level

- there are 20 general practices involved since September of 2001 with an estimated total of 1 300 patients with diabetes,
- chiropody and dietetic services are provided at practice level,
- there is an annual payment towards dedicated practice nurse time,

- microalbumin testing strips and 10g monofilaments are provided to practices, and
- there is on-going audit in all practices.

Support for Health Care Professionals

- a project manager was appointed in September 2001,
- a primary care diabetes liaison nurse has been employed,
- diabetes resource manual and patient education guideline poster were produced,
- diabetic foot assessment / classification tool was developed,
- vascular referral guidelines were developed with a vascular surgeon,
- standardised ophthalmology referral form was adopted,
- there is an annual seminar for networking, education and training, and
- a repeat audit and evaluation is nearing completion.

Benefits for the Patients

- people with diabetes can access almost all of their diabetes education and care, both general and specialised, in a local setting,
- care is delivered according to standardised and uniform guidelines throughout the practices involved in the project within the Board's area, and
- GP exercise referral (for home based activity) pilot commenced October 2002.

5.5 Nicotine Replacement Therapy

During 2000 the Heart Health Task Force endorsed a recommendation from the Advisory Forum on Cardiovascular Health that nicotine replacement therapy (NRT) should be included in the list of drugs which may be prescribed in the GMS scheme (R6.29). The Minister for Health and Children announced the introduction of NRT for GMS patients from April 2001. To the end of October 2002, there were 115 000 GMS NRT prescriptions at a cost of €4.2m.

5.6 Community Health Promotion

As well as the developments under health promotion set out in Chapter 5, with the implementation of the Strategy patients have increased access to other community based health promotion support services such as dietitians and smoking cessation services in line with recommendations R6.18, R6.21 and R6.24. With the *Heartwatch* programme, linkages will be strengthened between GPs, other community based professionals and health promotion staff.

i. Dietetics

Arising from a needs assessment with public health nurses in the Southern Health Board, two resource booklets are being developed which will be available nationally, on nutrition for heart health and nutrition in diabetes.

In addition to the 36 dietitians whose major brief is health promotion, 16 community dietitians have been employed to provide services in the community and in general practice. An example of service development is the Community Dietetic Service in the Western Health Board.

Community Dietetic Service - WHB

The Western Health Board established primary care dietetic clinics in each county within its region. The aim is to provide high quality dietetic care in the appropriate setting and in a timely manner. The main objective is to provide individualised dietary advice and counselling to clients with identified risk factors for coronary heart disease, in primary care based clinics. The service includes dietary advice and counselling for diabetes, hyperlipidaemia and weight management.

GPs, PHNs and practice nurses refer clients to the dietetic services. A total of 1 384 GMS and non-GMS patients were seen in the first half of 2002. The service continued to expand so that in the last quarter, the three community dietitians appointed under the Cardiovascular Health

Strategy, one post per county, provided a total of 178 dietetic clinics in health centres and GP practices throughout the region.

Benefits

All new clients meet with the community dietitian initially for a 30 minute consultation. Dietary advice is tailored specifically for each client and individualised food plans with specific goals are then set, as agreed with the client.

A recent patient satisfaction survey with the newly established dietetic clinics highlighted the high level of satisfaction due to the delivery of a user-friendly service, suitably located, with good follow-up, excellent education resources and professional, approachable community dietitians as service providers.

ii. Smoking Cessation

Smoking cessation clinics have been developed in community settings and referral protocols have been established in several health boards. Examples include clinics in the North Eastern Health Board and the South Eastern Health Board that support the secondary prevention projects referred to under section 5.3 above. In the Western Health Board the cardiovascular public health nurse was appointed in 2002 and is developing a community based smoking cessation service. Another example of this is the service developed in the Midland Health Board in conjunction with the diabetes eye clinic.

Evaluation of the effectiveness of a Smoking Cessation Clinic in conjunction with a Diabetes Eye Clinic - MHB

Aims

- to determine the effectiveness of targeting smoking cessation services to high-risk groups in a specific healthcare setting, and
- to establish and evaluate links between the hospital and community smoking cessation service.

Objectives

- to monitor referrals and attendance of patients from the diabetes eye clinic to the hospital smoking cessation clinic (SCC),
- to increase awareness among this population of the risks associated with smoking, including passive smoking on diabetes,
- to monitor changes in attitudes over a 12 month period in those referred to the SCC, and
- to monitor uptake of community smoking cessation services as a result of attending the hospital SCC.

Results of the Baseline Evaluation

- 247 (97%) of patients completed the questionnaire,
- 20% were smokers with a higher prevalence among females, with males more likely to be ex-smokers (56% versus. 30%),
- smokers were more likely to be exposed to passive smoke in the home, work and social environments; however non-smokers reported a high level of exposure socially (56%), and
- 81% of those suitable for referral attended the smoking cessation facilitator, with males more likely to refuse the opportunity.

Of those referred

- the majority were smokers (88%), predominantly contemplators with high nicotine dependency; 83% had attempted to quit before,
- twelve percent were ex-smokers but were frequently exposed to environmental smoke, and
- 50% of those seen in the hospital SCC wished to be followed up in the community; the tracking system indicating that 81% had been contacted by the community service on at least one occasion.

Following the pilot, the referral network has continued from the hospital into the community; 76 clients have been referred, 80% have been contacted in the community, with 18% subsequently quitting.

iii. Blood Pressure

Recommendations R6.44 and R6.45 refer to the treatment of patients with raised blood pressure in general practice. Research funded by the Cardiovascular Health Strategy is developing an audit tool for the management of hypertension in Irish general practice.

iv. Other lifestyle issues

A number of Cardiovascular Health Strategy recommendations relate to other lifestyle issues, such as alcohol and exercise. Several health boards have provided training for GPs and PHNs on supporting behaviour change for heart healthy lifestyles, GP exercise referral programmes have been piloted in two boards the SHB and the MWHB and a national framework through which this can be developed was also agreed, see section 4.9.

The Being-Well programme

The *Being-Well* programme introduced by many boards in recent years, as part of the implementation of the Cardiovascular Health Strategy is a health promotion course for the general public. It is based on the premise that individuals and communities can be supported in making healthy lifestyle choices by participating in courses that are enjoyable, participatory and informative. It focuses on the importance of individual choice and personal skills, group support, healthy environments and community based responses in enabling individuals to maintain healthy choices.

The aim of *Being-Well* is to provide a programme for individuals and communities that promotes good health and well-being by:

- raising awareness of a positive, holistic concept of health,
- providing information about specific health topics, e.g. healthy eating, physical activity, stress and relaxation, and legal drugs,
- encouraging understanding of the inter-relationship between the process of individual change and the need for a supportive physical and emotional environment, and
- developing personal skills and identifying community based resources and responses to support and maintain healthy lifestyle choices.

Courses are co-ordinated by the health promotion department and provide an opportunity to link with other agencies in relation to the promotion of general health and well-being in the community.

5.7 Other Initiatives

At regional level funding for the development of primary care services has not occurred at the same pace as with other services, pending the commencement of the *Heartwatch* programme. However, a number of initiatives have been funded, including:

- the purchase of training equipment, defibrillators and ECG transmission equipment for placement in general practice; these are used as part of first responder schemes referred to in Chapter 6, pre-hospital care,
- in relation to the role of public health nurses and other health professionals, (R.6.1 and R.6.2) programmes are being developed to provide training in health promotion and brief intervention techniques for behaviour change, and training in basic life support,
- links are being strengthened between health promotion departments, primary care units of health boards and GPs (R6.5),
- on training in smoking cessation, (R6.27 to R6.32), almost €200,000 has been allocated to STAG for GP brief intervention training in smoking cessation; training has also been offered to PHNs and pharmacists.
- The NWHB has developed a project to support general practices to address quality improvement related to cardiovascular health and to address the implementation of a number of recommendations within the Strategy (R6.8, R6.9, R6.21, R6.25). 26 GPs have undertaken projects in the last two years. Topics included:

- improving care of people with diabetes,
- managing risk factors more effectively,
- auditing the management of hypertension, and
- primary prevention.

The GPs involved have found the process useful and challenging and a number of areas for further improvement have been identified. Practice nurses and other staff were also involved in a number of these projects.

5.8 Linkages with Hospital Services

i. Access to Diagnostic Tests

Some initiatives have developed to strengthen linkages between hospitals and general practice. In the North Western Health Board and the East Coast Area Health Board procedures have been put in place for GPs to refer patients directly for echocardiography investigations. In the ECAHB the programme has substantially reduced waiting times for patients. The NWHB initiative also provides access to a number of other cardiac diagnostic tests.

Direct Access Cardiac Diagnostic Service in the NWHB

There is currently a considerable waiting time for many patients requiring cardiac diagnostic tests. The GP direct access cardiac diagnostic initiative in the NWHB aims to improve access for patients to these services. The objective of the programme is to facilitate GPs in the NWHB to book their patients in for cardiac diagnostic procedures according to set referral protocols. Cardiac diagnostic tests provided by this service include echocardiography, stress tests, ECGs and ambulatory 24 hr blood pressure monitoring.

The NWHB evaluation found that:

- there was a good detection rate for cardiac conditions, with 34% confirmed as having left ventricular systolic dysfunction or borderline dysfunction,
- 32% of those who were confirmed as not having heart failure had their diuretic treatment stopped,
- over 50% of patients were reported as having an improvement in their condition by their GPs, and
- all GPs found the service of value.

ii. Information Technology for Risk Factor Management and Secondary Prevention

Over the past decade, Beaumont Hospital has developed management systems for cardiovascular disease using computer programmes designed in-house to cope with the ever-increasing complexity of cardiovascular risk management. Using the dabl® cardiovascular programme, a nurse assesses all patients and arranges diagnostic tests. By the year 2002 the risk-management system has brought many advantages including:

- a 50% reduction in waiting lists,
- a 40% reduction in the time spent by a consultant with referred patients,
- halving of visits the patient has to make to the hospital, and
- a waiting time of no more than 30 minutes for patients attending the cardiovascular clinics.

It was acknowledged that 40% of patients referred to the cardiovascular clinics are low risk patients, who would be better managed by their family doctors. Conversely there are unidentified high risk patients in general practice who may need hospital services for intensive investigation and management.

The Beaumont Group realised that ideally risk-factor stratification of patients into high, medium and low risk would be achieved in general practice as well as in the cardiovascular clinics in Beaumont Hospital. Then it would be possible to determine which patients to refer to the hospital and which to manage in general practice. Consequently, the *Reduction of Heart Attack and Stroke through Prevention* (RHASP) pilot study was funded by the Cardiovascular Health Strategy in 2002 and 2003. It aims to determine the feasibility of sharing information on patients' risk status between the hospital and general practice settings. The findings from this pilot study will be considered in the context of the evaluation of the *Heartwatch* programme (Section 5.2).

chapter 6

Pre-hospital Care

6.1 Introduction

The Cardiovascular Health Strategy contains 18 recommendations on pre-hospital care. These include:

- the establishment of a national ambulance advisory council on a statutory basis,
- better response times and supporting information systems,
- public education to raise awareness of symptoms of impending heart attack, and
- schemes for pre-hospital thrombolysis.

6.2 National Initiatives

In line with recommendation R7.1 on 10 May 2000, the National Ambulance Advisory Council was replaced, on a statutory basis, by the Pre-Hospital Emergency Care Council (PHECC). The Council is an independent statutory agency with responsibilities for developing professional and performance standards for ambulance services and personnel. In particular, the Council takes charge of developing training standards for pre-hospital care in such areas as advanced and paramedic training for ambulance personnel. As part of its work plan the Council has adopted a set of Standard Operational Procedures for the ambulance service, which includes the administration of aspirin and emergency cardiac drugs, (R7.14 and R7.18).

In relation to the administration by emergency medical technicians (EMT) of cardiac care drugs, recommendation (R7.14), the PHECC submitted proposals to the Department of Health and Children in relation to the creation, within the ambulance service, of an emergency medical technician-advanced post. The Department of Health and Children plans to introduce this post from March 2003 and its introduction will facilitate the administration of certain medications.

6.3 Regional Initiatives

An additional 8 EMTs were employed under the Strategy, of which 5 were employed in the MWHB towards two-person crewing. Training of staff is ongoing in the ambulance services in line with the PHECC's Standard Operational Procedures. In addition to ambulance personnel, immediate care training was provided to hospital staff as well as to community based staff, including GPs and practice nurses.

One of the immediate priorities identified in the Strategy for pre-hospital care was the equipping of all ambulances with defibrillators. This has been achieved and the majority of staff has received appropriate training in the area. In the NWHB, a cardiac car was purchased that can respond more rapidly to emergencies than ambulances, given the geographic terrain, (R7.4 and R7.11).

All boards have considered the recommendation for a single command and control centre and have improved their information systems and clinical audit programmes, within resources, in particular the NEHB, WHB and the MWHB - recommendations R7.2 to R7.4.

i. Call to Needle times

The upgrading of equipment has greatly enhanced the call to needle time for patients. Other service developments have helped to reduce the call to needle time include the provision, by a number of boards, of 12 lead ECG telemetry. Examples include the NEHB and the SEHB.

12 lead ECG telemetry projects - NEHB and SEHB

The aim is to reduce the hospital "door-to-needle" time (i.e. door to thrombolysis / fibrinolysis), and therefore the "pain-to-needle" time for patients with acute myocardial infarction who enter the health system via the ambulance service.

This is achieved by obtaining a 12 lead ECG as part of the initial assessment of the patient. The ECG can be transmitted to the coronary care unit of the receiving hospital where it is reviewed by the physician on call. If acute myocardial infarction is suspected, the patient is brought directly to the coronary care unit. This eliminates any delays in the accident and emergency (A&E) department.

The introduction of the "fast-track" system facilitated the development of good working relationships between ambulance personnel and hospital staff. It also gave EMTs the opportunity to learn new skills and expand their knowledge base.

NEHB

Between July and September 2000 a pilot project was set up in Navan. During that time 28 patients with acute myocardial infarction received fibrinolysis with a mean "door-to-needle" time of 68.5 minutes. Of these:

- 24 patients presented themselves at the A&E department, 5 received fibrinolysis within the 30 minute target time recommended in the Cardiovascular Health Strategy.
- 4 patients entered via the ambulance service and were "fast-tracked" directly to the coronary care unit, the mean "door-to-needle" time was 14.5 minutes. All 4 of these patients received fibrinolysis within the 30 minute target time.

SEHB

Since August 2002, 15 ECGs have been transmitted to the emergency department. Four of these were patients suffering ST elevation MIs, two of whom received thrombolytic therapy in less than 15 minutes.

Case example

Dungarvan ambulance crew received a call to an 80 year old male with severe chest pain. On arrival the crew administered oxygen, aspirin and completed a 12 lead ECG. They were unable to administer glyceryl trinitrate, as the patient's systolic blood pressure was only 80 mmHg. On receipt of the ECG it was clear that the patient was having a myocardial infarction. From the information received from the crew, the patient's hospital record was obtained and a decision to withhold thrombolysis was made, due to an absolute contra-indication (frank haematuria).

ii. Community CPR

Recommendations R7.7 to R7.10, R7.13 and R7.15 refer to the need for early cardiopulmonary resuscitation (CPR), defibrillation and the provision of equipment and training to health professionals, in particular GPs in rural areas. The Irish Heart Foundation completed a review of CPR programmes in line with recommendation R7.7.

The most disadvantaged in gaining access to early intervention and treatment, through all the links of the Survival Chain, are those resident in rural communities due to the fact that they are furthest away from hospital services. In recognition of this, a number of geographically large boards introduced projects to facilitate early response to chest pain or suspected coronary attack for people in isolated areas.

Six community resuscitation training officers were recruited across a number of health boards that enhance the resuscitation services of staff working in the community such as PHNs. In some areas these staff link with the hospital setting (where a further 21 RTO posts were employed). These posts have facilitated the development of community CPR training programmes. In many boards they have successfully developed partnerships with the ambulance services, Order of Malta, Irish Red Cross Society, Civil Defence and local occupational health providers in the delivery of CPR training to the public.

In the MWHB, community resuscitation officers have trained parents with children at high-risk of cardiorespiratory arrest in basic life support skills (BLS). In addition, work with swimming instructors has standardised life support procedures.

The ECAHB carried out a review of community CPR training programmes in the Eastern Region in 2001. Recommendations from this review included an increase in the number of community CPR training programmes and also identified family and relatives of those attending cardiac rehabilitation programmes as a priority group. The ECAHB provided 15 bystander CPR courses for staff in 2002. The demand was overwhelming with all courses fully booked.

Other boards have completed CPR training programmes and the benefits were similar to those obtained in evaluations from the MWHB and the MHB.

Community Cardiopulmonary Resuscitation Training Project - MWHB and MHB

Objectives

The common objectives across all boards include to:

- ascertain CPR training needs of healthcare staff and implement / organise training programmes accordingly,
- develop a partnership approach with community voluntary first aid organisations and occupational health providers in the delivery of CPR training to members of the public, and
- monitor skill retention among programme participants and implement measures to evaluate programme delivery on which quality improvement decisions can be made.

Progress to date

Community resuscitation training officers priorities included:

- developing basic life support (BLS) baseline skills amongst hospital and community health professionals, and
- developing links with outside organisations that had infrastructure capacity to target and train the public in life support skills.

Benefits

MWHB

- BLS training of 346 health professionals in hospital and community settings,
- BLS training of 170 members of the general public, and
- Advanced cardiac life support (ACLS) training to 11 hospital based staff.

MHB

- 188 CPR courses have been delivered,
- 1 664 individuals (1 283 MHB staff, 381 non-staff) have attended 1 of the 4 CPR training programmes,
- 3% of attendees at the Heartsaver course contacted the emergency services and delivered CPR in an emergency situation after attending the course,
- 5.3% of attendees at the healthcare provider course delivered CPR in an emergency situation after attending the course, and
- 89% of attendees at both courses considered the quality of the training to be either good or very good.

iii. First Responders

Linked to the implementation of the same recommendations as those for Community CPR, many boards developed programmes to train first responders, either professionals or members of the public in first responder skills. In particular many boards have purchased defibrillators for use by GPs. Other examples of initiatives include:

- In the NEHB in 2002, 700 school children were educated on what to do in the event of a cardiac emergency.
- In the ERHA region the Public Access Defibrillation Pilot Project in the Blanchardstown Centre was launched in December 2001. It involved training 22 customer care staff in the use of an Automated External Defibrillator, of which there are 5 placed strategically around the Centre. The revalidation of the staff continues every 90 days at the James Connolly Memorial Hospital, Blanchardstown. It is hoped that the project will come into operation in the near future.
- The WHB commenced the CARE project that trains members of the public in first responder skills.
- In the North West the existing Donegal pre-hospital project, referred to in *Building Healthier Hearts* as a model for other boards to follow, was expanded through the purchase of equipment and extended to Sligo / Leitrim.
- Following the model of the NWHB, the SHB developed a first responder scheme in Dingle (R7.12 and R7.17).

Community Action in Response to Emergency (CARE) - WHB

CARE is a community based first responders programme activated by ambulance control centres to provide emergency care to the victim of accident or sudden illness. Ambulance control centres alert first responders in tandem with the ambulance activator. First responders are contacted by the group's mobile phone and pager.

To date, two groups of community based first responder instructors have been trained with four further groups of first responders either in training or waiting to start. A pre-hospital emergency care co-ordinator has been appointed to oversee its implementation.

Benefits

- Providing an effective pre-hospital cardiac response for the rural communities so as to improve the chance

of survival for cardiac patients and improving outcomes from cardiac episodes.

- Reduced time in responding to cardiac calls and providing meaningful intervention, i.e. defibrillators, life support and oxygen therapy.
- Enhance education and awareness by training more people in the community in life saving skills i.e. CPR and defibrillation, and to increase the number of people able to identify cardiac chest pain.
- Raised awareness in the prevention of heart disease through diet, exercise and other lifestyle changes.

First Responder Pilot Project - SHB

The project covered the Dingle Peninsula, with a population of approximately 7 000 and serviced by 3 GP practices. The nearest acute hospital is situated in Tralee, 30 miles away.

The Dingle Peninsula is a major tourist area, with a substantial rise in population during the summer months. This obviously leads to an increase in the demand for health care services

While the project is to be evaluated in February 2003, after its first year, 16 GPs have been trained in ACLS. These were provided with AEDs. Over 250 community and hospital staff have been trained in BLS. Members of the local community include local community groups, e.g. the GAA and ICA, and others groups such as Garda, Fire Service and Red Cross.

iv. Pre-hospital Emergency Care Project

The Western Health Board and the Midland Health Board have come together to provide optimum care for patients in the community presenting to Portiuncula Hospital, Ballinasloe with suspected heart attack and angina in the East Galway and West Midlands area.

East Galway/West Midlands Pre Hospital Emergency Care Project

This project involves the audit of the present management of patients with an acute coronary syndrome presenting at Portiuncula Hospital. An important element of the project is the provision of automated external defibrillators to 48 local General Practitioners (GPs) who have undergone specific training in the management of cardiac emergencies in the community. In addition each participating GP received a grant towards the purchase of emergency care equipment to improve the quality of patient care at community level. This includes oxygen cylinders, airway tubes to assist in breathing and further equipment to treat shock.

The project involves close collaboration between local GPs, the consultant cardiologist and support staff at Portiuncula Hospital, the ambulance services, the Department of General Practice, N.U.I. Galway, the Irish College of General Practitioners and the Primary Care Units of the WHB and the MHB.

Between October 2001 and the end of September 2002, 230 patients were diagnosed with cardiac disease through this programme. Thirty-two of these patients received thrombolytic treatment in hospital. The anecdotal evidence is that the project has reduced door to needle times (data currently being analysed).

This project is a further development in improving the quality of care to the patient in the community and in hospital and in bridging the gap between the hospital and the community to ensure that interventions are timely, appropriate and high quality.

Patient's Story

In 2002, two Galway based GPs had reason on to use the AED at their practice which was supplied because of their involvement in the East Galway West Midlands Pre Hospital Emergency Care Project.

A man walked into their surgery with chest tightness, which was described as not being severe in nature. The man collapsed and according to Dr X it was their first time to use the defibrillator machine and it worked spectacularly well. The man needed to be defibrillated twice. The man was taken to hospital for further treatment.

chapter 7

Hospital Services

7.1 Introduction

The Cardiovascular Health Strategy has 46 recommendations in relation to acute hospital services. The Strategy recommends:

- additional consultant cardiologists, support staff and upgraded facilities to meet the needs of a modern cardiology service which is equally accessible to all,
- improved access to diagnostic and invasive treatments,
- appropriate equipment, staffing levels and staff training for acute hospitals, regional and tertiary referral centres, and
- a range of clinical guidelines and protocols in respect of the appropriate care of patients in the hospital sector.

7.2 Planning Consultant Cardiology Services

i. Consultant Cardiologists

At the start of 2002, Ireland had 29 consultant cardiologists, the lowest per capita rate in the EU. While advancing the Strategy requires movement 'on all fronts', health boards and the ERHA were requested not to appoint additional consultant cardiologists during the first two years of implementation, pending a full review of service provision and consultant staffing in the context of the Cardiovascular Health Strategy.

Based on advice from the Advisory Forum on Cardiovascular Health, the Department of Health and Children established a Joint Working Group to Review Consultant Cardiology Requirements. The Joint Working Group has representatives from the Advisory Forum, Comhairle na nOspidéal, the Eastern Regional Hospital Authority, and the Department of Health and Children and is chaired by a representative of Comhairle na nOspidéal (see **Appendix B**). The terms of reference of the Joint Working Group include to:

- review existing service provision and identify shortfall at national and regional level in total complement of consultant cardiology posts,
- identify hospitals suitable for designation as regional centres, and
- develop a national plan outlining formal referral links to regional and tertiary centres from all acute hospitals not providing a specialist service.

In May 2001, the Joint Working Group submitted an interim report setting out the number and location of priority consultant cardiology posts. This interim report took account of the submissions from health boards and the recommendations contained in *Building Healthier Hearts*, in particular recommendations R.8.14, R8.15, R8.19 and R8.40. The group identified 25 priority consultant cardiology posts spread across all health boards and in different types of hospitals - acute, regional and tertiary.

Funding was available in 2002 to support the appointment of 9 additional consultant cardiologists as follows: 6 in the Eastern Regional Health Authority, 2 in the South Eastern Health Board and 1 in the North Eastern Health Board.

The Minister for Health and Children, Mr. Micheál Martin T.D. met with the Advisory Forum on Cardiovascular Health, the Irish Cardiac Society and the Irish Heart Foundation to discuss their disappointment at the pace of progress at the appointment of additional consultant cardiologists. The Minister affirmed that it would be a priority to address the appointment of additional cardiologists during 2003, as per the Working Group's interim report. With the funding available in 2003 a further 8 consultant cardiology appointments are expected, complementing the geographic spread of posts funded in 2002.

Therefore within eighteen months of the Working Group's interim report, funding has been allocated for the appointment of 17 additional consultant cardiologists and has increased cardiology manpower in each region. The final report from the group is due in the first half of 2003 and will address a range of recommendations in the Strategy, including:

- the location and consultant cardiology staffing of acute, regional and tertiary centres,
- the provision of interventional cardiology and electrophysiology, and
- referral arrangements between acute hospitals, regional centres and tertiary centres.

ii. Co-ordination of services in the ERHA region

Recommendation R8.35 refers to the co-ordination of cardiology services in the Eastern Region. In that regard, in 2002 the ERHA completed a review of its cardiology catheter laboratory services. This review has assisted the Joint Working Group to Review Consultant Cardiology Requirements in its consideration of services in the Eastern Region in the context of the development of services nationally.

The overall aims of the catheter laboratory review were to:

- ensure that existing cardiac catheter laboratories within the region were utilised to provide a safe and high quality service to achieve maximum health and social gain, and
- plan the orderly development of diagnostic and interventional services where the infrastructure of a catheter laboratory is required.

In the Eastern Region the target of 1 200 angioplasties per million is almost attained (R8.25). Approximately half of the procedures being carried out are for residents from outside the ERHA region. In looking to the future it is expected that there will be an increase in demand and an increase in patients who will need to return for repeat angioplasty and repeat procedures following initial insertion of pacemakers and implantable defibrillators.

The Report includes the following recommendations:

- that a model for a 24 hour service be developed,
- in the current economic climate future expansion of activity should come, in the first instance, from existing laboratories, and
- that current staffing levels in this specialty be reviewed and that a comprehensive workforce strategic plan be

developed to ensure that there are appropriately trained staff in sufficient numbers to meet the Authority's strategic objectives in this field.

7.3 Diagnostic and Treatment Services

i. Non-invasive Diagnostic Tests

With the implementation of the Strategy there has been substantial expansion of non-invasive specialised cardiac investigation services. Most health boards are now self-sufficient in the range of non-invasive diagnostic tests. A number of new or replacement echocardiography machines were purchased. In 1998, 11 hospitals in the country did not provide an echocardiography service. Letterkenny General Hospital was one such hospital and with funding from the Strategy the service commenced in the summer of 2002. To the end of September 2002, a total of 700 patients have been tested.

81 additional cardiac technicians were employed. This has enabled greatly improved access to diagnostic services, including electrocardiography (ECG service), stress testing, holter monitoring, 24 hour blood pressure monitoring, pacemaker checks, event monitoring and transoesophegal echocardiography.

€300,000 was provided for cardiac technician training in 2000. Additional student technicians were employed who are available as a back-up in the hospitals while completing a part-time course at the Dublin Institute of Technology, Kevin Street. Nationally, 21 additional students were employed. Feedback from employers has been very positive, with many, such as the Southern Health Board, highlighting that these students are making a very definite contribution to the work of departments.

In 2000, the South Eastern Health Board appointed a regional co-ordinator to oversee the training and development of Cardiac Diagnostic Services including:

- develop undergraduate and postgraduate training programmes,
- co-ordinate the implementation of training courses,
- implement sub-speciality responsibilities,
- evaluate and advise on service development, and
- quality audit of service including the assessment of waiting lists and waiting times.

The role of the Co-ordinator has been multi-faceted and has placed an emphasis on providing a better quality uniform service within the Board's area.

Student Technician Training Programme - SHB

Four student cardiac technicians are being trained for hospitals that previously did not have a technician - two for Tralee General Hospital and one each for Bantry and Mallow Hospitals. Up to now these hospitals were performing a very limited amount of stress testing, holter monitoring and ECGs, using staff with no formal training.

Having completed a three-year training course, these technicians will be fully conversant with all aspects of cardiac technology. The technicians will be available as fully trained and qualified personnel to support further expansion of cardiac diagnostic services. This will benefit both the hospital and community services, thereby supporting the development of an integrated and comprehensive cardiology service.

ii. Cardiology Procedures

Nationally, the waiting list for cardiology procedures has fallen by 24% from 1 102 in June 1999 to 841 in June 2002, which is in line with the national reduction in overall waiting lists during the same period. However, the waiting lists for cardiac surgery have fallen more markedly in the same time period, by 75% from 1 106 to 273.

7

While all health boards are not self-sufficient in invasive procedures the number of these procedures has increased substantially since 1996 as set out in Chapter 2. The increase can be summarised in the following table.

Procedure	1996 (no.)	2001 (no.)	% increase
Angiography	5 219	7 974	53
PTCA	939	2 800	198

Catheterisation laboratories are available in the Eastern Regional Health Authority, Southern Health Board, Western Health Board and the Mid-Western Health Board. The South Eastern Health Board has provision under its National Development Plan funding to develop a laboratory at Waterford Regional Hospital in 2005. Mobile laboratories are being considered by a number of health boards, including the South Eastern Health Board (as an interim service arrangement), the North Eastern Health Board and the Midland Health Board, pending the final report of the Joint Working Group to Review Consultant Cardiology Requirements.

Prior to the implementation of the Cardiovascular Health Strategy, patients in the North Western Health Board (NWHB) had to travel to Dublin for angiography, an invasive diagnostic procedure. With funding from the Strategy the NWHB is planning access to coronary angiography in Altnagelvin for patients attending Letterkenny General Hospital. A mobile cardiac catheterisation service is provided in Sligo General Hospital for patients in the catchment area, in line with recommendations R8.22 and R8.23.

Coronary Angiography and Telemedicine Service at Sligo General Hospital

Aim

To establish a coronary angiography service at Sligo General Hospital.

Objective

- To provide timely access for patients in the North Western Health Board to coronary angiography, and
- to reduce the number of patients that must travel the 296 mile round trip to Dublin for coronary angiography.

The North Western Health Board entered into a contract for the provision of a mobile cardiac catheterisation service with Cardinal Healthcare Ltd.. The service is provided on 2 consecutive days (Tuesday and Wednesday) every fortnight. Cardinal Healthcare Ltd. provides the mobile cardiac catherisation unit, cardiac nursing, cardiac technician and cardiac radiography services. Images are recorded on CD with a back-up on video. A close working relationship has been established with St. James's Hospital, Dublin and patients requiring intervention are referred there.

Benefits

- The provision of this service is an important service development for the region,
- over 600 patients have received the service at Sligo General Hospital,
- waiting times are reduced with patients being offered an appointment for the next mobile laboratory visit,
- reduced number of patients travelling to Dublin,
- reduced bed days for patients waiting for a coronary angiography service in Dublin, and
- the service further develops self-sufficiency for the region and the provision of day services for patients in the North West.

Telemedicine link

As a natural progression to the introduction of the

coronary angiography service, a tele-cardiology service with St. James's Hospital commenced in 2003.

The project is a joint service development between the two health care providers, CResT Directorate, St. James's Hospital, Dublin and Sligo General Hospital. This development facilitates the electronic transmission of coronary angiography patient data to St. James's Hospital. Both sites can view simultaneously and discuss the images. Also, on the day of the angiography service any image that requires more urgent consultation with St. James's Hospital can be transmitted on line.

This new development provides major benefits for patient care. The benefit to consultant, medical and nursing staff at Sligo General Hospital and at St. James's Hospital is that both sites can benefit from the education opportunities offered by participation in the cardiothoracic conferences.

DC Cardioversion at Waterford Regional Hospital - SEHB

Some patients presenting with an abnormal heart rhythm can have the condition reversed through the administration of an electric shock, a procedure known as DC cardioversion. Waterford Regional Hospital has put a system in place whereby these patients can be treated when they present to the emergency department. The first of these procedures took place in June 2002. Over the following four months:

- eight procedures were carried out, each patient received one DC shock and reverted back to normal sinus rhythm, and all had an uncomplicated recovery,
- care procedures have been refined in line with international guidelines and ongoing clinical experience, and
- a patient information guide / discharge booklet has been developed.

The eight patients had an average age of 52 years and an average stay of 3.6 hours in the emergency department. An analysis of patients admitted with the same condition 'out of hours,' who could not avail of this service showed that they had an average hospital stay of 3.9 days.

7.4 Coronary Care Units

With the implementation of the Cardiovascular Health Strategy there has been a gradual increase of staffing levels in coronary care units (CCUs). An additional 127 CCU nurses and other specialist nursing staff have been employed, supporting increased activity levels in CCUs, and enabling enhanced quality of care, through increasing time for communication and patient education, and for staff training. The equipment of many CCUs has been upgraded with Strategy funds and the number of CCU beds has been increased.

A national census was carried out of patients admitted with an acute myocardiol infarction in 1992 and repeated in 1994. These studies documented the pattern of presentation for hospital treatment by patients with suspected AMI in Ireland by means of national census of all forty centres that directly admitted patients with AMI to the CCU or ICU. No information has been available nationally since that time to allow for comparison or for benchmarking between our services and those of other European countries. With a research grant from Strategy funds a census of patients presenting with a suspected acute coronary syndrome is being carried out in the Spring of 2003.

7.5 Door to Needle Times

Patients with a suspected acute coronary syndrome require urgent diagnosis so that thrombolytic or other therapy can be instituted to break down the clot which is blocking the

coronary artery, restore blood flow and reduce damage to heart muscle. The effectiveness of thrombolysis is dependent on the timely administration of the drug. Hospital services therefore aim to fast-track patients so as to reduce 'door to needle' times to a minimum.

A number of service developments aim to reduce time to thrombolysis, including 12 lead ECG initiatives and others referred to in Chapter 6 on pre-hospital care. Other initiatives include:

- The Western Health Board is currently undertaking an audit of chest pain assessments of patients with suspected acute coronary syndrome presenting at accident and emergency departments in the region in order to improve their management and treatment.
- The Eastern Regional Health Authority is conducting an audit of door to needle times for thrombolysis in all 9 hospitals in its region. This aims to:
  - establish the percentage of patients who receive thrombolysis within the standard of 30 minutes in each hospital and overall in the region, and
  - establish the percentage given aspirin in the pre-hospital or accident and emergency settings.

7.6 Chest Pain Services

In line with recommendation R8.17, a number of chest pain services have been developed with Strategy funding.

i. Chest Pain Assessment Units

One model of this service is run in conjunction with the emergency department, to cater for patients who present with chest pain of acute onset. Substantially greater numbers of patients present to emergency departments with symptoms of chest pain than require admission. The main functions of a chest pain assessment service attached to the emergency department are to facilitate early identification of patients with acute myocardial infarction (AMI) or other acute coronary syndrome, and prevent inappropriate discharge. This improves the 'door to needle' times in the provision of thrombolytic therapy for patients with AMI. In addition, the unit can identify cardiac risk factors and arrange referral for further diagnostic tests or risk factor reduction, as appropriate.

A chest pain assessment service linking the emergency and cardiology departments opened at St. James's Hospital in September 2001. Initial findings are that:

- 85% of patients have been discharged without needing formal admission under the cardiology team,
- 6% of patients were referred for follow-up in cardiology out-patient departments, and
- 60% of those admitted received coronary angiography within 48 hours of admission.

ii. Chest Pain Clinics

Another model of chest pain service is provided to fast-track patients when the GP does not consider that immediate admission is required but that the symptoms warrant diagnosis and consultant opinion sooner than would be provided through a standard out-patient appointment. In the Southern Health Board, a chest pain clinic was opened at Cork University Hospital in September 2002. Referrals are accepted from all GPs in the health board region and the capacity is for 25 patients per week. One third of the first 70 patients were diagnosed as having angina. The benefits of this service include:

- it provides a structured link between the primary care and hospital settings,
- the aim is to see the patient within days of referral,
- rapid diagnosis of angina, enabling further diagnostic tests and treatment as appropriate,
- risk stratification and education of high risk groups,
- patient reassurance in a friendly and non-threatening environment, and
- GP notification of patient's diagnosis within 24 hours of patient consultation.

Given that both models are new services, the ERHA hosted a seminar in 2002 to explore models of chest pain clinics to meet patients' needs. The outcome from this seminar will influence the development of these services in the future.

7.7 Heart Failure Management

It is estimated that at least 80 000 people have heart failure in Ireland and in line with experience in other developed countries, there is evidence that the prevalence is increasing. Overall, prognosis is poor in these patients, many of whom are elderly. Approximately 15% of patients are admitted to hospital annually, with a high risk of readmission. There is evidence that a model of structured care, with hospital liaison after discharge and good communication with general practice, can reduce readmission rates and improve quality of life. The service is multidisciplinary, delivered in hospital and in the community, involving both the patient and families. Fifty professionals involved in the care of patients with heart failure have received training with Strategy funding.

With the implementation of the Strategy, a number of health boards, including the South Eastern, North Western, Midland and Mid-Western and the Eastern Regional Health Authority have employed specialist nurses and are providing a heart failure service. Other staff, such as cardiac dietitians, employed with Strategy funds are linked to these services. A structured service for patients with heart failure was developed some years ago by St. Vincent's Hospital in Dublin, linking to St. Michael's Hospital. Strategy funds have been provided to carry out further research on that service and the findings will inform the development of quality services in other locations.

7.8 Resuscitation Training

In line with recommendation R8.1, health boards have recruited 21 additional hospital based resuscitation training officers. These provide training in line with accepted standards and best practice. As a result of these appointments and the purchase of necessary equipment in most hospitals throughout the country, hospital staff receive resuscitation training on an ongoing basis to international standards. In some boards there are linkages with community based resuscitation training officers in the provision of this service. This structured and standardised approach to life support training ensures healthcare providers have a level of knowledge and skill to take appropriate action during cardiac emergencies.

In 2001 and 2002, up to 500 basic life support (BLS) instructors were trained as AED instructors. Along with the 250 instructors who were recertified, approximately 12 000 people were trained in BLS throughout 2001 and 2002.

Prior to the Strategy, limited funding restricted the availability of advanced cardiac life support (ACLS) training courses. However with funding from the Strategy the availability of ACLS courses for trainers run by the Irish Heart Foundation has increased. In 2001, 40 ACLS provider courses were held throughout the year, with 910 ACLS providers trained. This gives an indication of the scale of resuscitation training each year since the launch of the Strategy.

7.9 Clinical Guidelines

The Cardiovascular Health Strategy has a number of recommendations on improving the quality of patient care through the use of clinical guidelines. It will be important to ensure that professionals in the hospital and primary care settings are involved at all stages of the implementation of clinical guidelines so as to provide standardised patient assessment and care across these boundaries. Further information on clinical guidelines is provided in Chapter 9.

chapter 8

Cardiac Rehabilitation

8.1 Introduction

There are 10 recommendations on cardiac rehabilitation in the Cardiovascular Health Strategy. In summary these called for:

- every hospital treating patients with heart disease to provide a cardiac rehabilitation service,
- the service to be consultant led, multidisciplinary, exercise-based and involve family members,
- trained co-ordinators to be part of every programme, and
- a standardised format of audit to allow for comparison between programmes.

8.2 National Initiatives

When the Cardiovascular Health Strategy was launched structured cardiac rehabilitation services were available in only a small number of hospitals as set out in section 9.11 of *Building Healthier Hearts*.

One of the most successful aspects of the Strategy's implementation to date is the structured provision of Phases I and II cardiac rehabilitation services in almost every hospital that treats patients with heart disease (R9.1, R9.6 and R9.7). Phase III is available in 29 hospitals, compared to 12 in 1998 and Phase IV is being developed in a small number of centres.

The appointment of additional consultant cardiologists, referred to in Chapter 7, section 7.2, will ensure that all cardiac rehabilitation services are consultant led in the future (R9.3).

The Cardiac Rehabilitation Working Group of the Advisory Forum on Cardiovascular Health advised the Department of

Health and Children on the appropriate career structure for cardiac rehabilitation co-ordinators, (R9.4). This is currently being considered by the Health Services Employers Agency. In addition, the Advisory Forum is also considering manpower planning for cardiac rehabilitation co-ordinators and whether or not clinical training could be done in regional centres.

Research has been funded under the Strategy to achieve a national consensus on the use and format of a cardiac rehabilitation audit system for Ireland, (R9.5). The research aims to examine the available audit forms and to identify a core set of questions appropriate for national audit purposes. Comparable audit data collected throughout the country will facilitate evaluation of the key components of providing a quality service. The audit will provide for an estimate of the need for the service and the benefit to patients and hence allow for more informed decisions on future funding.

8.3 Regional Initiatives

Since 1999, a total of 109 additional people, forming multidisciplinary teams, have been appointed to develop cardiac rehabilitation services. Of these, 45 additional cardiac rehabilitation co-ordinators have been appointed. Each of these has received appropriate training, assisted in part by the Irish Heart Foundation.

Patients and families now have access to a multidisciplinary team of specialists, which includes a cardiac rehabilitation nurse specialist, a cardiac liaison nurse, a dietitian, a social worker, a physiotherapist and an occupational therapist.

In relation to facilities and equipment, minor capital funding from the Strategy allowed many hospitals acquire or develop extra space to facilitate the introduction or expansion of a cardiac rehabilitation service. In addition, this funding provided or replaced necessary equipment. However, it must be acknowledged that services in a number of locations are being provided in accommodation that is too small or otherwise inappropriate. A future challenge is to secure capital funding to develop these facilities.

One of the main issues arising from the rapid development of the cardiac rehabilitation service is ensuring that the service expands to allow for the participation by all eligible patients. Health boards, including the ERHA, have carried out needs assessments to estimate unmet demand.

Audit of Cardiac Rehabilitation in the ERHA

The ERHA completed an audit to:

- collect baseline data on variables related to invitation to participate in cardiac rehabilitation,
- analyse the data in relation to age / gender / geographical location (postal district) / hospital, and
- establish the percentage of eligible people who,
  - were invited to a programme of cardiac rehabilitation,
  - attended initial classes, and
  - completed the cardiac rehabilitation programme.

A summary of the findings shows that:

- there are 1 500 places for cardiac rehabilitation in the Region,
- less than half of patients eligible for cardiac rehabilitation were invited,
- two thirds of patients availed of the invitation to cardiac rehabilitation,
- patients who attended had a very high completion rate,
- invitation rate varied across hospitals, and

- there was no difference in invitation and participation rates between GMS and non-GMS patients.

A separate piece of work in the ERHA documents the capacity within each cardiac rehabilitation department in each of the nine hospitals. The two studies will allow the ERHA marry the information on capacity with information on eligibility to identify the need for further service development in the future.

i. Phases I and II

Phases I and II refer to the provision of personalised advice and information in hospital and in the weeks after discharge. An important achievement in the implementation of the Strategy to date, is the development of structured Phases I and II cardiac rehabilitation services in almost every acute hospital treating patients with heart disease. The development of these services means that patients are leaving hospitals with appropriate advice on lifestyle choices in order to reduce their risk and enhance their survival rates and quality of life.

ii. Phases III and IV

Phases III and IV refer to intermediate post-discharge and long-term management. The expansion of these phases has been restricted in some health boards pending the appointment of additional consultant cardiologists, referred to under section 8.2 above.

The services for patients include:

- dedicated provision of education and counselling sessions on risk factor reduction, social adaptation and lifestyle modifications, and
- prescribed exercise training in structured (typically) 6 week programmes.

Cardiac rehabilitation benefits patients as follows:

- slows, stops or reverses the progression of their underlying cardiac disease,
- reduces their risk of further cardiac events, and
- enhances their quality of life by restoring self-confidence, removing deconditioning effects of illness and promoting healthy levels of exercise.

One of the indirect benefits from cardiac rehabilitation is the number of support groups that have been formed by patients after the cardiac rehabilitation programme finishes. These groups continue to have access to cardiac rehabilitation multidisciplinary teams.

Patient's Story

Joe is 70 years of age and is a retired Station Master. Five years ago he had a heart attack followed by coronary artery bypass surgery. He completed a cardiac rehabilitation programme in July 1998.

Poor exercise tolerance prior to the programme meant that he started with 1 minute on each machine. In 2001, he completed a 50 mile cycle in 2 days, and by 2002 completed a 50 mile cycle in 1 day. Joe now exercises regularly including a 25 to 30 mile cycle with other cardiac patients every weekend. Joe is a member of Midland Cardiac Support Group.

Phase III cardiac rehabilitation has been developed in the community in the NWHB. Outreach programmes also have been developed in more densely populated areas including by St. Luke's Hospital, Kilkenny and by St. Columcille's Hospital, Loughlinstown. The service at St. Columcille's was developed following an audit of cardiac rehabilitation services in St. Columcille's that revealed that approximately 30% of cardiac patients had difficulty attending the hospital

based programme, but if this service was made available locally in areas such as Arklow, they could attend.

Links were established with local GPs, health centres, leisure centres and ambulance services to examine the feasibility of this programme. A half-time physiotherapist was appointed, a portable defibrillator was purchased, and exercise facilities identified. Evaluation of uptake rates and patient satisfaction will take place in 2003.

Phase IV is being developed in a small number of centres, including the WHB.

Phase III Community Cardiac Rehabilitation Programme - NWHB.

The North Western Health Board was the first health board in the country to introduce a community based cardiac rehabilitation programme to improve access to the service. It was evaluated to assess the feasibility, safety, and effectiveness of the pilot community cardiac rehabilitation programme in a leisure centre setting.

The aim was to provide a Phase III programme in a community location for patients who could not travel the

distance to the hospital 3 times a week. Portable telemetry systems were purchased during 2002 that enabled the cardiac rehabilitation co-ordinators facilitate higher risk patients in the community setting.

Benefits

The community cardiac rehabilitation programme was feasible, safe, and as effective in most outcomes measured as the hospital programme, with very high satisfaction ratings among both participants in the programme, and among the health professionals involved in its delivery.

Patient's story

Collette is a 69 year old widow who presented with a heart attack in February 2002 and two weeks later had an angioplasty.

She underwent the cardiac rehabilitation programme at St. Columcille's Hospital in April 2002. This consisted of an eight-week exercise programme, three times a week, with education sessions on risk factor modification once a week. Collette found great comfort and confidence from the rehabilitation programme. She previously would not have exercised and following the programme she now goes to a local gym.

Phase IV cardiac Rehabilitation - WHB

Mayo General Hospital has developed Phase IV cardiac rehabilitation and is working with Croí to extend cardiac rehabilitation into the community. This offers contact every six months between the rehabilitation service, the patients and spouse or family.

The aim is to provide a Phase IV cardiac rehabilitation service for patients who have completed the Phase III programme.

Objectives

- Maintenance of exercise regime and other lifestyle changes previously made,
- monitoring for development of new risk factors,
- assessment of compliance with therapy, and
- identify any worsening of a cardiac condition.

Benefits

Patients are encouraged to attend support groups in their local area e.g. those provided by Croi. The cardiac rehabilitation co-ordinator is available by phone or in person to discuss problems.

A partnership between the cardiac rehabilitation department and local gyms in County Mayo has recently been developed to encourage compliance to exercise for

those who prefer a gym environment. This involved a training day for gym staff in Mayo, which incorporated exercise in cardiac rehabilitation, dealing with chest pain and cardiac emergencies. Staff from eight gyms attended, with the remaining scheduled to attend in 2003.

Patients can benefit from a lifestyle change / stress management course. The aim of the course is to improve quality of life of the patients, empower and support them making relevant changes, thus preventing or delaying the likelihood of further cardiovascular disease.

This course is delivered by a health promotion tutor and co-ordinated by the cardiac rehabilitation co-ordinator. It involves groups of 10 to 12 patients coming to the unit once weekly (2 hours) for seven weeks. The programme includes topics such as assertiveness / communication skills, goal setting, positive thinking, stress management, relationships, managing change, and relaxation. To date, the patients have tended to stay together as support groups after the programme is completed.

chapter 9

Information Systems, Audit and Research

9.1 Introduction

The National Health Strategy *Quality and Fairness* endorses the development and implementation of guidelines for the management of common clinical conditions, the setting of quality standards in delivering health care and the development of health information systems to support service planning and clinical audit. The Strategy assigns roles to the Health Information and Quality Authority in relation to the development of health information systems, quality assurance and service reviews in the context of agreed national standards.

In addition to a chapter on these topics, the Cardiovascular Health Strategy made recommendations throughout the report on disease surveillance, guidelines for best practice, clinical audit and research, as follows:

- establishment of a cardiovascular disease surveillance system, accessing mortality and morbidity data, data from cardiovascular disease registers (coronary care, coronary interventions, cardiac surgery) and from population health surveys, and the dissemination of information to professionals and to the public (Recommendations 4.2, 5.10, 5.20, 5.46, 6.47, 7.3, 8.44, 10.1, 10.9 to 10.18),
- the development and implementation of guidelines for health promotion, disease prevention and for clinical care of patients (Recommendations 5.8, 5.12, 6.22, 6.26, 6.48, 6.49, 6.51, 6.52, 8.6, 8.8, 8.10, 8.16, 8.32, 8.33); structured audit, based on evidence-based practice guidelines and against agreed standards (Recommendations 5.10, 5.17, 5.26, 5.43, 5.56, 5.57, 5.58, 6.7, 6.15, 6.44, 6.46, 6.54, 6.55, 7.1, 7.3, 7.4, 7.16, 8.3, 8.4, 8.45, 9.5, 10.20), and
- research to support the prevention of cardiovascular disease, and the treatment and rehabilitation of patients with cardiac disease in Ireland (Recommendations 4.1, 5.24, 6.45, 8.5, 10.3, 10.19).

9.2 Planning for Audit and Clinical Governance

Work to date on the development of practice guidelines and of cardiovascular information systems has been based on planning the key components of the audit cycle to support clinical governance, as follows:

- agreeing, disseminating and implementing best practice guidelines,
- setting quality standards to be achieved,
- putting health information systems in place,
- utilising health information systems or special surveys for clinical audit and peer review, to estimate the extent to which quality standards are achieved,
- reviewing procedures to address any weaknesses identified, and
- reviewing, updating, disseminating and implementing revised guidelines.

The necessary links between these components of the audit cycle have been kept in mind in implementing the Cardiovascular Health Strategy recommendations on guidelines and health information systems. The aim is to ensure linkages between the guidelines and health information systems initiatives, so as to create parallel and communicating structures to support the agreement of appropriate standards for clinical care and a systematic approach to clinical audit.

The Irish Cardiac Society was requested by the Advisory Forum on Cardiovascular Health to take a lead role in developing national guidelines for the care of patients with cardiac conditions. The National Cardiovascular Information Systems (NCIS) Steering Committee was established to oversee the pilot coronary care register and to advise on the implementation of cardiovascular health information systems. Two research officers have been employed on contract, one to support the work on practice guidelines and one to support work on NCIS. The researchers are based in the Department of Epidemiology in the Royal College of Surgeons in Ireland. The Evidence-based Health Care Fellow in that department is available for three sessions weekly to advise the Advisory Forum on Cardiovascular Health, on a range of topics including the development and implementation of clinical guidelines. Through these structures, linkages are being created with professional organisations and with health service staff to develop and implement practice guidelines and cardiovascular health information systems.

9.3 Practice Guidelines

i. Regional /Local Practice Guidelines

A questionnaire was circulated to health boards in 2002 to elucidate what, if any progress has been made in guideline development regionally and locally. The results indicated that, whilst many of the health boards were aware of the need for cardiovascular guideline development at regional level, most of them had not commenced the development process and were awaiting national guidance. There was a high level of awareness of international cardiovascular guidelines, particularly from the European Society of Cardiology and the American Heart Association and many cited these as forming the basis for regional service planning.

Several of the health boards reported examples of local guidelines, particularly for cardiac rehabilitation, heart failure and thrombolysis. The term 'guidelines' was used as an umbrella term to describe a variety of documentation ranging from specific protocols to check lists. Some guidelines have been developed by a formal process reflecting the interests or clinical needs of health care disciplines, in particular physicians and nurses. Members of the multidisciplinary health care team have on occasion been involved in the development of guidelines. Some local guidelines did outline an implementation plan, updating or evaluation process.

ii. National

The Irish Cardiac Society was requested by the Advisory Forum on Cardiovascular Health to take a lead role in developing national guidelines for the care of patients with cardiac conditions. Other professional organisations and health agencies will be involved as appropriate.

Three priorities have been agreed for guideline development and implementation, namely heart failure, acute coronary syndromes and electrophysiology. In addition, guidelines for patient care will be developed as part of *Heartwatch* (see Chapter 5, section 5.2). The literature on the effectiveness of different strategies in smoking cessation services is currently being reviewed, to support the development and implementation of guidelines for best practice.

The European Society of Cardiology has published and regularly updates evidence-based practice guidelines on a range of topics. These will form the basis for Irish guidelines and after consultation will be adapted for use in the Irish setting. Health boards will be supported to disseminate the guidelines, with staff training and review of relevant regional and local structures and processes. Timescales will be agreed for reviewing the implementation of the guidelines.

iii. Participation in European Project

Staff involved in the development of guidelines relevant to cardiac disease are co-investigators in a EU initiative called AGREE - Appraisal of Guidelines for Research and Evaluation in Europe. There are a total of 23 countries involved in the project.

The aim is to inform cardiovascular health care professionals about guideline development and appraisal. Four regional workshops are being arranged for May / June 2003 in Dublin, Cork, Galway and the Midlands. A wide diversity of cardiac health care professionals, professionals allied to medicine, managers, policymakers and consumers will be invited to attend these workshops. The multidisciplinary approach will contribute to the learning process. The workshops will lay the groundwork for collaboration between the disciplines in the development and appraisal of cardiovascular guidelines in the future.

9.4 Planning Cardiovascular Health Information Systems

i. National Steering Committee

The National Cardiovascular Information Systems (NCIS) Steering Committee was established to oversee the pilot coronary care register and to advise on the implementation of cardiovascular health information systems as set out in the Cardiovascular Health Strategy Report *Building Healthier Hearts* (see **Appendix B**).

A committee had been set up under the aegis of the Irish Heart Foundation to oversee the development of a coronary care register. This was in line with recommendations in the Cardiovascular Health Strategy and accordingly, dedicated funding was provided for the CHAIR pilot project in the Southern Health Board (see section 9.5). NCIS will oversee the evaluation of the pilot project and advise on the national rollout of a hospital register of acute coronary events.

The NCIS Steering Committee also has a remit to review national and international data sets when advising on the structure and content of a comprehensive cardiovascular health information system. In undertaking its work, the Steering Committee will liaise with the Advisory Forum on Cardiovascular Health. NCIS is aware that developments will need to comply with the recommendations of the forthcoming National Health Information Strategy.

Sub-committees of NCIS are considering major topic areas, including the development of draft clinical data sets, the overall architecture of cardiovascular health information systems, and data protection. Proposed developments will take into account other sources of information which contribute to the surveillance of cardiovascular diseases, namely the Census of Population, vital statistics (mortality data), the Hospital In-Patient Enquiry (HIPE), and treatment data e.g. from the General Medical Services (Payments) Board.

ii. Scoping Exercises

In addition to vital statistics and routine data sources, there have been some initiatives of particular relevance to the development of cardiovascular health information systems.

The Irish Cardiac Surgery Register has collected data since 1983, aiming to monitor trends in adult cardiac surgery. The Register provided information suitable for a number of purposes, including clinical audit, comparison with newer treatments such as angioplasty and comparison of trends in Ireland with those internationally. Some surgical teams did not contribute data from 1993 to 1999. It is proposed to consult with cardiothoracic surgeons about the re-establishment of a complete national register (R10.15), as a component of a comprehensive cardiovascular health information system.

An inventory of systems already in place was carried out under contract. The inventory identified several types of cardiology databases. They included registers of coronary care, coronary interventions and pacemaker insertion. While some core data sets are submitted to UK registers for the purposes of clinical audit, most sites developed their data sets without reference to other Irish registers. Data are also collected in a number of locations on topics such as cardiac diagnostic tests and rehabilitation. The NCIS Steering Committee will take into account the systems already in place, particularly those which have been collecting data for several years, as well as international registers and emerging technologies when planning the national cardiovascular health information system.

Scoping Exercise for Cardiovascular Disease Surveillance System, Western Health Board

The extent of data on cardiovascular disease available to health care providers within the Western Health Board is limited. Up to date information is essential to support the delivery of services, clinical audit and the planning of health services. It is also required for proactive dissemination to health professionals and to the public.

Aim

To explore the contribution a database in the Cardiology Department of University College Hospital, Galway (UCHG) can make to a regional cardiovascular disease surveillance system.

Benefits

Data collected within the Cardiology Department would be entered into the database and analysed, to report on number and type of procedures by patients' age, sex, area of residence and type of medical cover. The database would enable UCHG to collect clinical information relating to procedures including angiography, angioplasty and pacemaker implantation. The feasibility of linking the database to the hospital's Patient Administration System would be investigated, thereby streamlining the collection of patient information.

The data would describe trends in diagnostic tests and procedures to support service planning, and form the basis of a clinical audit system for staff within the Cardiology Unit at UCHG. The data could also be used for Cardiovascular Strategy research projects, such as research into equity of provision of care for cardiovascular disease.

Further development of the cardiovascular database will take account of the work of the NCIS Steering Committee. A further phase will be to examine the feasibility of extending the database to other hospitals in the Western Health Board.

iii. Plans for a Cardiovascular Information System

Following consideration and discussion of the information collected to date, plans are being prepared for a modular information system, using different but compatible data sets in different care locations. When a variable is included in more than one data set, it will be coded and defined similarly across the system. Draft data sets will be compiled, taking account of the information being collected in existing Irish and international registers. These will form

the basis for discussion with stakeholders, paying particular attention to clarify the purposes for which data are being collected and to the identification of core data sets appropriate to the particular care location. Data sets and coding descriptions are being drafted for the following modules:

- Acute coronary syndromes (AMI and related conditions),
- Percutaneous coronary interventions (angioplasty, stents, other devices),
- Adult cardiac surgery (CABG, valve procedures),
- Paediatric cardiac surgery,
- Cardiac pacemakers and implantable defibrillators,
- Electrophysiology,
- Heart failure, and
- Cardiac investigations (e.g. ECGs, 24 hour Holter monitoring, 24 blood pressure monitoring, exercise tolerance tests, echocardiograms, trans-oesophageal echocardiograms and thallium scans).

In addition, there will be ongoing communication with the researchers who are working with the Irish Association of Cardiac Rehabilitation to develop a clinical audit system for cardiac rehabilitation. Likewise, those working at national level to implement the *Heartwatch* programme will be kept fully informed of the data sets being developed for other care locations.

9.5 CHAIR Pilot Project

The Strategy recommended that a pilot study of a hospital-based register of patients presenting with symptoms of acute myocardial infarction be established as a priority (R10.11). At local level this would support clinical audit and health services planning. It was envisaged that, after evaluation, a national register of coronary care would be established. After adjustment for relevant demographic and clinical variables, this would enable clinicians to compare local and national practice and outcomes. In addition, a national register would provide valuable information on the epidemiology of acute coronary disease.

The Council on Acute Coronary Care of the Irish Heart Foundation submitted a proposal for a coronary care register to the Department of Health and Children. Funding was agreed and following consultation with stakeholders, the Coronary Heart Attack Ireland Register (CHAIR) project is being piloted from 2002 in the Southern Health Board.

CHAIR is a computerised register that gathers information on patients admitted to hospital with a confirmed or suspected acute coronary syndrome (ACS). The objectives are to:

- record, analyse and describe registered patient demographics, diagnosis and treatment details, and hospital outcomes, and
- facilitate the development of strategies to improve the quality of ACS patient care by supporting clinical audit and contributing to health service planning.

The CHAIR pilot will run for a year, at which time it will be externally evaluated. While further work is being done by the clinical data sets sub-committee of NCIS to refine the coronary care data set, it is expected that the CHAIR pilot project will yield valuable information on the feasibility of the coronary care register, including patient acceptability and the resource implications of registration.

CHAIR Project in the Southern Health Board

The Coronary Heart Attack Ireland Register (CHAIR) pilot project has been implemented in 6 out of the 8 acute hospitals in Cork and Kerry. These are the Bon Secours Hospital, Tralee, Mallow General Hospital, the South Infirmary/Victoria, Mercy and Bon Secours hospitals in Cork as well as in Cork University Hospital. Registration is planned to start in the remaining acute hospitals in the region, Tralee and Bantry, in March / April 2003.

Each patient is provided with information about the register. The purpose of the register is explained and information is provided on the type of data being collected. Personal data are maintained in the database in the hospital and anonymised data, with no name or address, are transmitted to the central database.

Attention is also being paid to training of registration staff. The coding manual is amended when queries arise about the coding of variables. The challenges addressed and solutions put in place by the CHAIR project in the Southern Health Board will be documented in the evaluation, contributing to plans to implement a national coronary care register.

9.6 Research

i. Research Grants

The Cardiovascular Health Strategy made some recommendations on research to support implementation or to address priority topics. In 2001 funding in the order of €500 000 was allocated for research and evaluation and research proposals were invited.

The main aims of the research grant scheme were:

- to address recommendations which are not specifically the remit of the Department of Health and Children, health boards or of any one organisation,
- to engage health professionals in monitoring, clinical audit and evaluation of their work, and
- to encourage coalitions of professional organisations, health boards and academic departments in research to support development, implementation and evaluation of health services.

The Advisory Forum on Cardiovascular Health was involved in the assessment and selection processes. Two of the five projects chosen relate to specific Cardiovascular Health Strategy recommendations, namely a survey of patients admitted to coronary care units and the development of an audit system for cardiac rehabilitation.

ii. Regional Initiatives

During 2000 a number of health boards appointed research and information officers to support the implementation of the Cardiovascular Health Strategy and to undertake evaluation of Strategy initiatives. While a total of 14 researchers are employed they are not evenly distributed around the country, with up to three in some boards and one or none in others. In several boards, they are employed within departments of public health, working closely with hospital and community based personnel.

Title of Project funded by Research Grant	Main Applicant
Development of a standardised audit tool for use in cardiac rehabilitation evaluation	Dr. David Hevey
CCU 2002: National Census of the Presentation and Management of Acute Myocardial Infarction and Acute Coronary Syndromes in Irish Hospitals	Dr. Davida de La Harpe
Pilot Project on a New Structure for Management of Heart Failure	Dr. Kenneth McDonald
The Development and Evaluation of a Generic Audit Tool for the Management of Hypertension in Irish General Practices	Dr. Peter Cantillon
Factors affecting smoking cessation after discharge from an acute hospital	Prof. Leslie Daly

Information on all five projects is provided in the body of this review. Results and reports from the funded projects are expected by mid-2004.

A national inventory is being created of the projects undertaken to date. Most of the projects address locally identified priorities, for example, audit of a service. Resources at national level to support cardiovascular health services research are currently limited. The potential to develop some national health services research through co-ordination of the work of these research officers has been identified and work in this area is planned for 2003.

iii. Euro Heart Survey

Euro Heart Survey is a reiterative series of research studies co-ordinated by the European Society of Cardiology to collect information in a systematic way on patient care, in the context of the European Society of Cardiology guidelines on investigation, treatment and prevention of cardiovascular disease. The surveys are carried out in approximately 70 clusters in 25 countries. Each cluster consists of a university hospital and up to three general hospitals. From start to finish each survey can take up to three years, with data collection over a 4 to 6 month period.

Topics of surveys in recent years include secondary prevention (EUROASPIRE), heart failure, acute coronary syndromes and atrial fibrillation. Some Irish centres have participated in some of the surveys to date. In future it is intended to take a systematic and co-ordinated approach to the participation of Irish centres in the Euro Heart Survey.

iv. Research Strategy

The Advisory Forum on Cardiovascular Health is completing work on a Research Strategy for the Cardiovascular Health Strategy.

The National Health Strategy *Quality and Fairness* sets the context for implementing recommendations in the Cardiovascular Health Strategy and for associated health services research. The Health Research Board's (HRB) Strategy '*Making Knowledge Work for Health, A Strategy for Health Research*' identified twin approaches to support research activities, namely 'supporting science for health' and 'supporting research and development for health'.

It will be important to maintain and further develop in Ireland a community of high quality 'science for health' cardiovascular researchers. Health services research to support implementation of the Cardiovascular Health Strategy should address the prevention, diagnosis, treatment and rehabilitation of cardiovascular disease in Ireland. The Advisory Forum has identified research for service audit as having a high priority. Where possible, the audit cycle should use data collected as part of routine health information systems, though special surveys may also be required.

The structures established to deliver cardiovascular quality and information agendas should be closely linked to and integrated with those funded to undertake cardiovascular health services research. It will be important to link research structures to communication networks for health professionals, so as to improve access to information on research methods and to disseminate the results of research studies.

Some discussions have been held between representatives of the Advisory Forum on Cardiovascular Health and the HRB to assist the development of the Research Strategy for the Cardiovascular Health Strategy consistent with the HRB's national research strategy. The Advisory Forum on Cardiovascular Health will consult further with the HRB, including on the management of funding for cardiovascular health services research so as to build research capacity and to maximise research quality and efficiency.

The Advisory Forum will also consult further with stakeholders, researchers and experts to further clarify research topics and to draw up a prioritised research agenda to support the implementation of the Cardiovascular Health Strategy.

chapter 10

Future Challenges in Implementing the Cardiovascular Health Strategy

10.1 Introduction

The first three years of implementing the Cardiovascular Health Strategy has seen a substantial increase in cardiology prevention and treatment services. Through the implementation of the Strategy, these services are already making a difference, providing more accessible, equitable, better quality care for patients with cardiac conditions. Developments have occurred particularly in the pre-hospital services, in access to diagnostic tests in hospitals, in resuscitation training and in cardiac rehabilitation. The *Heartwatch* secondary prevention programme in general practice is expected to improve the quality of care for people with identified coronary heart disease. The development of health promotion services will have a positive impact on people's health in the short term but has a longer time scale to show delayed morbidity and mortality.

It is clear that there have been substantial improvements across the range of services addressed by the Cardiovascular Health Strategy. The Heart Health Task Force considers that the reasons for the Strategy's successful implementation to date include:

- the Government's commitment to tackling heart disease and its ongoing support for the implementation of the Cardiovascular Health Strategy,
- the prioritisation of the recommendations, led by the Advisory Forum on Cardiovascular Health, provided guidance for the coherent and systematic implementation of the Strategy's 211 recommendations, as well as identifying the key stakeholders responsible for each,
- the intersectoral partnerships that have been strengthened by the work of the Heart Health Task Force, involving statutory, non-statutory, voluntary and social partners,
- the national and regional implementation structures have maintained strategic direction for service developments,
- the multidisciplinary approach to addressing heart disease within the health sector,

- the enthusiasm of staff at all levels to use the resources provided to best effect to improve access to preventive, diagnostic and treatment services, and

- the commitment of staff to maintain their skills through attendance at training programmes and to become involved in quality improvement initiatives.

Everybody associated with future implementation of the Cardiovascular Health Strategy must be mindful of the successes achieved to date. It is important to remember that the application of resources has resulted in a substantial increase in service provision. Achievements to date must be kept in mind when we consider future challenges and how best to meet them to continue the successful implementation of the Strategy.

10.2 Future Challenges

Ireland's Changing Heart set out to describe developments arising from the implementation of the Cardiovascular Health Strategy, based on information received from health boards and other relevant organisations. From this review it is possible to identify the extent to which Strategy recommendations have been implemented. The information also permits the identification of future challenges in improving heart health in the population and in providing high quality treatment and preventive services for patients with cardiac disease.

The key challenges facing the future implementation of the Cardiovascular Health Strategy mirror those identified in the National Health Strategy, *Quality and Fairness*, and can be categorised as follows:

- **Improve population health**
  Support intersectoral work for health promotion, to reduce risk of cardiovascular disease and improve quality of life,
- **Reduce inequalities**
  Develop a robust approach to reduce inequalities in cardiovascular health and mortality,
- **Equitable access to services**
  Continued resources and support to fully implement outstanding Cardiovascular Health Strategy recommendations to meet the needs of the growing numbers of older people and to provide new treatments for which there is evidence of effectiveness, and
- **Improve the quality of services**
  Development and implementation of practice guidelines, the implementation of cardiovascular health information systems, support for clinical audit and for research to enhance the quality of services.

Many of the required actions to meet these key challenges will be addressed by completing the implementation of the original Strategy, *Building Healthier Hearts*. Additional actions are required due to problems experienced in implementing Strategy recommendations, particularly in relation to deficits in infrastructure and the shortage of trained staff in a number of disciplines. The changing epidemiology of coronary heart disease in our population and the emergence of evidence-based treatments must also be considered because they have major implications for estimated future volume and costs of cardiology services.

These challenges and the required actions to address them are discussed further below. Additional research will be required to scope the magnitude of some of the problems identified and the costs of the necessary service responses.

10.3 Improve Population Health

The Heart Health Task Force acknowledges that implementation of the Cardiovascular Health Strategy to date has been concentrated in the health sector, including health promotion and has focused in particular on the detection, treatment and rehabilitation of disease. *Building Healthier Hearts* also identified the importance of multisectoral health promotion and of the prevention of heart disease and related conditions in the population.

Vigorous multisectoral efforts are required to reduce the prevalence of the major cardiovascular diseases in our population. The purpose of such multisectoral collaboration is to create an environment, which 'makes the healthier choice the easier choice'. This may require legislative support, as enacted to support tobacco control.

Fiscal measures may be required, such as substantial increases in the price of tobacco products to discourage smoking. Attention to the physical environment may be required, such as improved access to facilities for physical activity, including well-lit footpaths.

At a strategic level two critical issues must be addressed to support sustainable implementation of the recommendations on intersectoral action:

- developing health impact assessment. Policies, strategies and legislation originating from non-health sectors can impact directly or indirectly on the health of the population. It is essential that all relevant policies and strategies undergo a comprehensive process of 'health proofing' to ensure that they have a positive impact on the physical, mental and social well-being of the population, and
- increasing the awareness of other sectors of their capacity to contribute to health promotion interventions, and encouraging and supporting them to do so.

Changes in attitudes are also necessary among groups in society to support heart healthy behaviour in individuals. Such changes can be promoted through measures to promote the healthier choice as well as by media campaigns, work with community groups, health education and counselling by health professionals.

The Task Force recognises its role in advancing the multisectoral agenda and plans to address it with a more focused approach in 2003. In future the Task Force plans to address intersectoral collaboration on a topic-by-topic basis. To begin, the Task Force has identified physical activity as a theme for 2003. The Department of Health and Children is liaising with key stakeholders in this area, including the Irish Sports Council, the Department of Education and Science, and local authorities.

Since the launch of the Cardiovascular Health Strategy in 1999, *the Health Promotion Strategy 2000-2005* and *Quality and Fairness* considered structures for intersectoral collaboration. The Heart Health Task Force will feed into a broader health promotion forum when established and recognises that there may be a need to reconsider its role in light of any new structures.

The Heart Health Task Force recommends that the prevention of heart disease be a high priority in moving forward at both national and regional levels. In that regard, there should be a greater emphasis on intersectoral collaboration for health promotion.

10.4 Reducing Inequalities

The link between poverty and ill health is strong and well recognised. *Inequalities in Mortality 1989-1998* published by the Institute of Public Health using all-Ireland mortality data reported that total mortality rates were substantially raised in semi-skilled and unskilled workers and in those whose socio-economic group was not recorded on the death certificate compared to other groups. Standardised death rates (taking account of any differences in the age structure of the population) from the circulatory diseases mirrored the trends in total mortality. In the Republic of Ireland rates for the circulatory diseases increased from 90 per 100 000 in the professional socio-economic group to 129, 138 and 279 in self-employed and salaried employees, non-manual and skilled workers, and semi- and unskilled groups respectively. Similar trends were seen for ischaemic (coronary) heart disease, stroke and diabetes mellitus.

The mortality trends are consistent with the available evidence on social class gradients in risk factors for cardiovascular disease. Population surveys have shown smoking prevalence to be approximately twice as high in men and women in the unskilled social class compared to the professional and managerial class. The first SLÁN survey confirmed the social class gradient in risk factors for coronary heart disease. It is expected that the forthcoming results of SLÁN2 will show a similar social class gradient in factors that increase risk of vascular disease.

The National Anti-Poverty Strategy (NAPS) sets the target that the gap in premature mortality between the lowest and highest socio-economic groups should be reduced by at least 10% for circulatory diseases, for cancers, for injuries and for poisoning by 2007.

To achieve this target for circulatory diseases requires prioritisation by all those involved in implementing the

Cardiovascular Health Strategy to promoting the health of disadvantaged groups. As for other population groups, this requires that the physical environment must be conducive to heart healthy behaviours. It also requires that particular emphasis be given to working with community groups, as otherwise advice may be unrealistic and inappropriate.

Through resources made available from the Cardiovascular Health Strategy some community development initiatives are already under way in areas with the highest levels of disadvantage. These initiatives have worked with the communities and individuals, attaching particular importance to their priorities, and to taking a holistic community and personal development approach, rather than honing in on specific health behaviours.

Effective interventions require sustained programmes and dedicated resources. The highest priority must now be accorded to learning more about existing partnerships in disadvantaged areas and to exploring how links with the health sector can be strengthened.

In addition to health promotion, it is also important that those who are disadvantaged and experiencing poor health are able to gain access to the health services they need. The reduction in waiting lists for cardiology procedures and the expansion of cardiac diagnostic services have improved access for those in receipt of services in the public sector in general. The expansion of other areas such as secondary prevention and cardiac rehabilitation has improved access to these services. Staff training, education materials and the implementation of practice guidelines and health information systems should pay special attention to the needs of people who are disadvantaged.

The Heart Health Task Force considers that health promotion with disadvantaged groups and individuals should be prioritised in future implementation of the Cardiovascular Health Strategy. Links should be established with implementation structures for the National Anti-Poverty Strategy. A plan for health promotion with disadvantaged groups should be prepared and supported by any necessary research.

10.5 Equitable Access to Services

i. Resources and infrastructure

Access to services has improved with the implementation of the Cardiovascular Health Strategy. Continued additional revenue funding is essential to support its future implementation, to provide appropriate access to high quality services. Based on estimates when the Strategy was launched and on funding to date, approximately €150m additional revenue funding will be required to complete its implementation.

The effective application of revenue funding is dependent on access to adequate capital funding. The exclusion of the Cardiovascular Health Strategy from the National Development Plan seriously restricts implementation. For example, cardiac rehabilitation services have been located by many hospitals in 'Portacabins' or hired additional space. Such temporary accommodation is frequently less than ideal. Similarly, diagnostic services have been expanded in many locations but some are in rooms that are too small, limiting the throughput of patients. Inadequate accommodation acts as a barrier to services reaching their full potential.

The Heart Health Task Force considers that the Strategy's implementation is in a 'Catch 22' situation. Revenue funding has been available to develop new services, however the lack of capital funding for infrastructure has restricted service development. This situation will be exacerbated with the recruitment of consultant cardiologists to bring Ireland in line with consultant staffing levels in other developed countries.

Capital investment is required to provide accommodation and facilities to an acceptable standard. The lack of capital funding restricts the development of hospital services such as chest pain clinics and catheterisation laboratories. It is estimated that capital funding of at least €100m is required to provide comprehensive modern cardiology services.

The Heart Health Task Force considers it is essential that sufficient revenue and capital funding be provided to complete the implementation of the Cardiovascular Health Strategy.

ii. Factors with implications for future funding

A number of factors have important implications for future funding. These are:

- the cost implications of appropriate prescribing,
- the changing epidemiology of cardiovascular disease, and
- the impact of new evidence-based treatments.

There is evidence, for example from the EuroASPIRE study of secondary prevention, that many patients in Ireland as well as in other countries were not receiving evidence-based medications after a coronary event. Increased awareness of appropriate treatments for raised blood pressure and raised cholesterol, and improved cardiac rehabilitation and secondary prevention services are likely to have increased the proportion of patients in receipt of appropriate medications, contributing to the increased prescriptions of cardiovascular drugs in the General Medical Services scheme in recent years (Chapter 2, table 12).

The changing epidemiology of cardiovascular disease has major implications for the provision of cardiology services and of other health and social services for older people. As set out in Chapter 2, death rates from all causes are decreasing steadily. Since the early 1980s death rates from coronary heart disease have been halved in men and women under 65 and have gone down by a quarter in those aged 75 to 79 years. The reducing death rates reflect lifestyle changes and improved treatments with better outcomes in those who develop symptomatic disease.

More people than ever are surviving into old age but a high proportion have one or more chronic diseases, including cardiovascular conditions. The prevalence of heart failure in older age groups is increasing steadily in developed countries, including Ireland. The prevalence of obesity and of diabetes is also increasing, with the associated increased risk of cardiovascular disease.

The high prevalence of risk factors as well as of symptomatic cardiovascular disease in older age groups of men and women in Ireland highlights the importance of health promotion and prevention strategies to reduce the burden of disease in our population. Continued implementation of the Cardiovascular Health Strategy must take into account the increasing numbers of people living into older age with chronic cardiovascular disease.

As in other countries, it is likely that changing lifestyles and medical treatments have resulted in declining risk of coronary heart disease. Treatment of symptomatic disease is also more effective with continuing improvements in outcomes, for example after an acute coronary event. Evidence now available from randomised controlled trials has major implications for the cost of treating patients with cardiac disease.

Developments with such cost implications include the use of drug eluting stents in percutaneous coronary interventions - the drug impregnated into the stent reduces the risk of the artery becoming blocked again after the procedure. Sophisticated pacing devices are available to treat patients with heart failure, with evidence of benefit in those with the poorest cardiac function. Applying these treatments to maximum effect will be very costly both because of the cost of the treatments and because of the large numbers of people for whom the treatments are indicated.

Other treatment developments have implications for how we organise health services for patients with suspected acute coronary syndrome. There is evidence that percutaneous coronary intervention (PCI) within hours of onset of symptoms of an AMI improves outcome compared to the use of thrombolytic therapy. PCI requires a cardiac catheterisation laboratory whereas thrombolysis is a drug therapy that can be safely given by trained and equipped general practitioners as well as in the acute hospital setting. 'Primary PCI' has cost implications because of the increased staffing requirements in the major cardiology centres. Providing timely access to primary PCI for patients at a distance from major cardiology centres would be very challenging indeed.

The Heart Health Task Force requests the Advisory Forum on Cardiovascular Health to oversee a more detailed study of the factors which have cost implications for the future development of cardiology services in Ireland. Such factors include the increased prevalence of cardiovascular conditions in older people and the appropriate application of evidence-based treatments.

iii. Workforce planning

Workforce planning is another resource challenge facing the Cardiovascular Health Strategy's future implementation. For some professions most available staff have now been recruited or supply has not been adequate to meet the demand to fill vacancies arising. There are instances where funding is available for posts but there has been a lack of suitably qualified candidates. The Advisory Forum on Cardiovascular Health has carried out a substantial volume of work to estimate the gap between supply and demand in a number of relevant professions.

The Heart Health Task Force recognises that, even with immediate action, it will take some years to solve the imbalance between supply and demand for some types of professional. Solutions lie in a broader context than the Cardiovascular Health Strategy. For example, the shortage of physiotherapists and occupational therapists necessary for cardiac rehabilitation is being addressed through increased training places on foot of the 2001 report by Peter Bacon & Associates, *Current and Future Supply and Demand Conditions in the Labour Market for Certain Professional Therapists.*

A major challenge in this area relates to cardiac technicians. The present number of trained staff is insufficient for posts available but changes in the training programme will actually reduce the number of students qualifying each year during the transition period.

The Heart Health Task Force requests the Advisory Forum on Cardiovascular Health supported by the Department of Health and Children to prepare a report on workforce planning for the continued implementation of the Cardiovascular Health Strategy.

10.6 Improve the Quality of Services

i. Increased efficiency

It is imperative that all health services operate effectively and efficiently. Cardiovascular Health Strategy funding appears to have had the greatest impact where there was nationally co-ordinated staff training and guidance in relation to work practices, for example in cardiac rehabilitation, resuscitation training and pre-hospital care. Increased national co-ordination will improve the effectiveness and efficiency of implementation in other service locations. Training and the implementation of practice guidelines are an integral component of the *Heartwatch* programme for secondary prevention in general practice. Co-ordinated training should also be an integral component of the implementation of practice guidelines.

The Heart Health Task Force recommends that an increased proportion of Cardiovascular Health Strategy funds be retained for national co-ordination of initiatives, perhaps through the Health Boards Executive (HeBE) or another similar body.

ii. Practice guidelines, information systems and clinical audit

With the continued implementation of the Cardiovascular Health Strategy it will be important to ensure that service expansion is associated with improved quality. This involves the application of appropriate treatments in the appropriate setting, with monitoring, peer review and clinical audit to assure the quality of services.

Progress in developing clinical guidelines is described in Chapter 9. It will be a priority to train staff to implement the guidelines. Health service structures and processes must be reviewed to ensure that staff are supported to appropriately apply evidence-based treatments. In this context, the implementation of guidelines for shared care between the hospital and general practice settings will be particularly important.

Plans to develop a comprehensive cardiovascular health information system are also described in Chapter 9. Implementing such a system presents many challenges. However, high quality information on the care provided for patients with cardiovascular health information systems is essential for clinical audit and for service planning.

With the implementation of clinical guidelines and the establishment of a comprehensive cardiovascular health information system, it will be possible to agree standards of care. Structures for clinical audit and peer review can then be put in place to estimate the extent to which services achieve the agreed standards.

To apply the components of the audit cycle with complete coverage across the range of cardiology prevention and treatment services will present many challenges and will not be achieved in the short term. It will require the ongoing commitment of staff at all levels of service planning and delivery. However putting structured systems in place to assure the quality of patient care is no longer an optional extra but must go hand in hand with continued investment in cardiology services.

The Heart Health Task Force recommends that the quality of services for cardiac patients be assured through the implementation of clinical guidelines and a comprehensive cardiovascular health information system as a basis for clinical audit and service planning. It is recognised that this will require continued enthusiasm and commitment of staff, as well as the application of resources to put the necessary systems in place.

iii. Research

Support for research is another strategy to improve the quality of services. In addition to the direct benefits of applied research to the quality of services, an active research programme contributes to the attraction and retention of high calibre staff. Some research grants have been awarded and the results will have an impact on services for patients with cardiac disease in Ireland. The Heart Health Task Force notes that the total funding for research is low in Ireland by international standards.

While awaiting the Research Strategy being prepared by the Advisory Forum on Cardiovascular Health, the Heart Health Task Force is of the view that a high priority should be given to applied research to support clinical audit. In future, greater resources should be applied to research to support implementation of the Cardiovascular Health Strategy.

10.7 The Way Forward: Monitoring, Evaluation and Consultation

Ireland's Changing Heart set out to describe developments using Cardiovascular Health Strategy funding in services for cardiac patients. The Heart Health Task Force is committed to continuing to monitor progress in the implementation of the Strategy. The Task Force is of the view that ongoing evaluation is imperative to ensure value for money and to attract sufficient funds in the future for the Strategy's implementation. Aspects of quality of services, including the outcomes of patient care, will receive greater attention in future Task Force reports.

Service planning will be supported by the more detailed studies recommended above on health promotion with disadvantaged groups, workforce planning and on factors such as changing epidemiology and new treatments which have major cost implications for cardiology services. In addition, two initiatives receiving Strategy funding will be the subject of independent evaluation towards the end of 2003. These are the register of coronary care - CHAIR - being piloted in the Southern Health Board and the Initial Phase of *Heartwatch*, the Secondary Prevention Programme in General Practice.

As a national implementation structure, the Heart Health Task Force believes that it would be helpful to have an independent component to future monitoring of the Strategy and in that regard would welcome the opportunity to work with the Health Information and Quality Authority, when established.

The implementation structures for the Strategy, including the Heart Health Task Force, the Advisory Forum on Cardiovascular Health, representatives of the health boards and the Department of Health and Children hold an annual conference. The next such meeting is planned for June 2003. Previous meetings have reviewed service developments. *Ireland's Changing Heart* can be the starting point for the 2003 meeting, with the focus on planning to meet the challenges ahead.

The Heart Health Task Force hopes that the identification of future challenges in *Ireland's Changing Heart* will stimulate debate and discussion by stakeholders. The Task Force recommends that the national and regional cardiovascular committees discuss future challenges in implementing the Cardiovascular Health Strategy. The outcome of these discussions can inform the proceedings of the meeting of the implementation structures planned for June 2003 and contribute to plans to meet future challenges in promoting heart health and treating patients with cardiac disease in Ireland.

Appendix A
Progress on each recommendation

This appendix briefly describes progress in implementing each of the recommendations in the Cardiovascular Health Strategy, *Building Healthier Hearts*. Please note the format:

6.29 **(2001)**
NRT is available free of charge to all GMS patients from 1 April 2001.

6.29 *refers to the recommendation number from Building Healthier Hearts.*

(2001) *refers to the year this recommendation was prioritised for implementation by the Advisory Forum on Cardiovascular Health.*

Overview of Cardiovascular Disease

2.1 **(not prioritised)**
In line with this recommendation, the treatment of stroke and other vascular diseases is not being considered by the implementation structures for the Cardiovascular Health Strategy.

Cardiovascular Disease in Ireland

4.1 **(not prioritised)**
The Advisory Forum on Cardiovascular Health invited applications for research proposals in 2002. No research proposal submitted related to mortality patterns. However a number of research reports have been published which provide valuable information on the epidemiology of cardiovascular disease, including the *Cork and Kerry Diabetes & Heart Disease* Study by University College Cork. *Inequalities in Mortality*, a report by the Institute of Public Health on mortality throughout Ireland from 1989 to 1999 provided a valuable reference on inequalities in mortality from cardiovascular diseases in Ireland.

4.2 **(not prioritised)**
See recommendations under information systems, audit and research.

Health Promotion

5.1 **(2001)**
An additional Assistant Principal, Higher Executive Officer, Executive Officer and Clerical Officer have been appointed to the Cardiovascular Health Strategy Unit of the Department of Health and Children. A National Heart Health Advisor has been contracted to support the work of the Department and the national implementation structures. In addition the National Nutrition Advisor and Health Promotion Advisors support the implementation of the Strategy.

5.2 **(2002)**
A substantial proportion of Strategy funding in the first two years was allocated to health promotion. 139 additional staff including health promotion officers, nutritionists and other staff were employed to work on cardiovascular health promotion and disease prevention, including supporting the national campaign, *Ireland needs a Change of Heart*. The new health strategy, *Quality and Fairness*, launched in November 2001 places an emphasis on the prevention of disease.

5.3 **(2001)**
Constantly reviewed by the Task Force, the intersectoral developments at national and regional levels through the implementation of the Strategy contribute to developing an environment that makes the healthier choice the easier choice.

5.4 & 5.5 **(2003)**
The planning process does require health impact assessment. A number of statutory and non-statutory authorities have given consideration to the health impact of their policies. For example, the Irish Sports Council has contacted all national governing bodies of sports organisations and assured them of the Council's support in their efforts to curb smoking by spectators during sporting events. Health impact assessment is being considered in a broader context following the publication of *Quality and Fairness* in 2001.

5.6 **(2002)**
For the Joint Oireachtas Committee on Health and Children, the monitoring of the effects on health of policy and planning decisions is being considered as part of the implementation of the new health strategy, *Quality and Fairness*.

5.7 **(2001)**
A national campaign *Ireland needs a Change of Heart* was developed and launched in September 2000. Two phases were delivered, including a focus on physical activity in 2001 / 2002 through the all-island *get a life get active* campaign. Health boards have supported this campaign through local initiatives.

5.8 **(2003)**
The National Heart Health Alliance has been identified as the body to develop a set of guidelines for good practice and work is expected to commence in 2003. In 2003, the priority will be on smoking cessation interventions.

5.9 & 5.10 **(5.9 - 2002) (5.10 - 2001)**
Since the publication of the Strategy in 1999, there have been substantial developments with the introduction and implementation of social and personal health education (SPHE) within the school curriculum.

By September 2003, all post-primary schools should be providing SPHE at Junior Cycle level. The National Council for Curriculum Assessment are currently developing the Senior Cycle curriculum. At primary school level the principle of a curriculum with a spiral structure also applies and the aim is that the post-primary curriculum will build on the primary level curriculum.

5.11 **(2002)**

Health promotion in the workplace has expanded considerably in recent years and a workplace co-ordinator has now been appointed in all health boards, in the main from Cardiovascular Health Strategy funding. The workplace co-ordinators are responsible for the development of plans for workplace health promotion and the initiation of pilot projects at regional level.

To support and co-ordinate these developments, in 2002 the Health Promotion Unit established a network for workplace health promotion.

5.12 **(2002)**

Health promotion initiatives have a specific focus on disadvantaged communities. With resources from the Cardiovascular Health Strategy, sustained programmes have been developed and introduced across a wide range of lifestyle risk factors and population groups. Some health promotion officers have been employed to work exclusively with the disadvantaged. The Combat Poverty Agency has completed a review of current nutrition health promotion programmes with disadvantaged people, to inform future work in this area.

5.13 **(2002)**

Young people are involved in many of the health promotion initiatives developed or expanded with Cardiovascular Health Strategy funds.

5.14 **(2003)**

Some community based projects have been funded at regional level. The Department of Social, Community and Family Affairs supports a number of programmes that have been identified as priority channels for supporting community groups in the future.

5.15, 5.16 & 5.17 **(2002)**

With the development of health promotion and cardiac rehabilitation services and the introduction of the *Heartwatch* programme from October 2002, links have been developed between these services and primary care, general practice and hospital services, including clinical services for older people. A number of boards have developed specific health promotion services for pregnant women.

5.18 & 5.19 **(2002)**

Most boards have increased support for health promotion for staff, ranging from subsidised access to leisure clubs to health promotion services providing individual counselling and advice.

5.20 **(2002)**

The first SLÁN survey published in 1999 provided detailed data on smoking prevalence. Data are collected on a regular basis as part of the *Break the Habit*, anti-smoking campaign. The SLÁN survey was repeated in 2002 and results are expected in April / May 2003.

5.21 **(2002)**

On 27 March 2002 the President signed the Public Health (Tobacco) Act, 2002 that addresses this recommendation.

5.22 **(2002)**

Since July 1999 an additional €1.30 was levied on a packet of 20 cigarettes. The Minister for Finance established a group between his department, the Revenue Commissioners and the Central Statistics Office to look at the issue of removing tobacco from the CPI. The CPI, excluding tobacco, increased by 4.6% in 2002, identical to the overall rate of inflation for the Irish economy in 2002 that was also 4.6%.

5.23 **(2001)**

The Health Promotion Unit of the Department of Health and Children runs the national anti-smoking campaign *Break the Habit*. A related campaign *NICO*, was produced in 2000 and targeted teenage girls. The national programme is run in conjunction with local health boards. Both campaigns were supported by the national quitline that provides counselling to smokers to help them quit.

5.24 **(2002)**

Teenage girls were targeted in 2000, through the *NICO* campaign. The national anti-smoking campaign is targeted at the whole population, including adults and pregnant women. A number of health boards are undertaking work with parents and pregnant women to raise awareness of the health effects of smoking. Various aspects of smoking, including its effects on health, are included in the SPHE curriculum.

5.25 **(2001)**

The Irish Sports Council has contacted all national governing bodies of sports organisations and assured them of the Council's support in their efforts to curb smoking by spectators during sporting events

5.26 **(2001)**

The establishment of the Office of Tobacco Control in May 2002 provides a structure to co-ordinate an audit of the implementation of smoking control policies in the health services.

5.27 **(2001)**

26 additional health promotion officers have been employed to co-ordinate tobacco control initiatives.

5.28 **(2002)**

The establishment of the Office of Tobacco Control in May 2002 provides for the establishment of a Tobacco Council that provides a structure for the implementation of this recommendation.

5.29 & 5.30 **(5.29 - 2001) (5.30 - 2002)**

Since the Strategy was published, the Food Safety Promotion Board (FSPB) has been established with a remit for nutrition health promotion. Discussions have commenced between the Department and the FSPB to consider their respective roles in this area. The FSPB plans to establish a food and nutrition forum that will bring all relevant agencies together to exchange information and co-ordinate action.

5.31 **(2001)**

The year 2002 marked the tenth anniversary of the National Healthy Eating Campaign. There is now a 60% awareness of healthy eating

messages amongst the population. Disadvantaged communities are targeted by this campaign.

5.32 **(2001)**

Health boards have employed 36 additional nutritionists and the Department of Health and Children's Nutrition Advisor supports the implementation of the Strategy.

5.33 & 5.34 **(5.33 - 2003) (5.34 - 2002)**

The Heart Health Task Force has discussed financial incentives towards healthy food choices and there is a recognition that these are complex recommendations to implement. The Task Force has agreed to consider the issues further and a paper on the issues is being prepared to assist this discussion.

5.35 (1) & (2) **(2003)**

All State receptions run by the Department of Health and Children aim to have healthy food choices. The Department of Health and Children established two groups in 2001 to look at catering and nutritional guidelines in hospitals for patients and visitors and they are expected to complete their work in early 2003.

(3), (4), (5) (6), & (7) **(5.35 3 - 2001) (5.35 4,5,6 - 2003) (5.35 7 - 2002)**

Nutrition guidelines for primary schools have been developed by the NWHB and are being adapted as national guidelines. A number of initiatives have been developed by health boards to promote access to healthy food to lower income groups, including the fruit and vegetable co-op in Limerick. Workplace health promotion officers have enhanced both the range and awareness of healthy food choices available in workplace canteens and with catering companies.

The Department of Social, Community and Family Affairs has identified a number of programmes under its remit that have the potential to support the implementation of Cardiovascular Health Strategy. The Combat Poverty Agency has completed a review of nutrition interventions with disadvantaged groups in order to inform future work in this area.

5.36 **(2002)**

An Bord Iaschaigh Mhara and An Bord Glas are actively promoting the consumption of fish and of fruit and vegetables, respectively. The Heart Health Task Force has established closer links with both bodies and the potential for collaborative promotions will be explored in 2003.

5.37, 5.38, 5.39 & 5.40 **(2002)**

Healthy weight forms part of the physical activity and healthy eating campaigns at national and regional levels. Brief intervention training for health professionals has been provided and a number of health boards have developed a range of initiatives and resources, including a booklet for people quitting smoking to avoid excessive weight gain in the South Eastern Health Board. The dietitians and physical activity co-ordinators employed with Cardiovascular Health Strategy funding provide training for professionals as well as counselling patients to attain and maintain a healthy weight. Being a healthy weight forms part of the *Heartwatch* programme in the general practice setting.

5.41 **(2001)**

The Irish Sports Council is represented on the Heart Health Task Force. The implementation of Irish Sports Council's Strategy *A New Era for Sport* has developed 12 local sports partnerships around the country. These partnerships are made up of a wide variety of agencies from the statutory, voluntary, sporting bodies and health boards. The overall aim of the local sports partnerships is to increase participation in sport and physical activity and ensure that local resources are used to best effect. Since their establishment in 2001, the local sports partnerships have been developing plans to increase participation in physical activity and sport.

5.42 **(2001)**

The health boards' physical activity strategy has been reviewed in 2002 and will help direct future planning of services in this area.

5.43 & 5.44 **(5.43 - 2002) (5.44 - 2001)**

See 5.41 above.

5.45 **(2001)**

The Heart Health Task Force has discussed access to safe walks and footpaths and to leisure facilities. The Irish Heart Foundation's *Sli na Slainte* provides over 100 pathways to health in many major towns and cities across the country. These are safe, accessible and maintained by local authorities.

5.46 **(2002)**

Following the appointment in 2001 / 2002 of 12 physical activity co-ordinators across boards, a monitoring system for physical activity will be considered in 2003. *Heartwatch* will measure the physical activity levels of the programme's participants. The second SLÁN survey will give an indication on physical activity levels in addition to the information from the research carried out under the *get a life, get active* campaign.

5.47, 5.48, 5.49, 5.50 & 5.51 **(2001)**

Since the publication of the National Alcohol Policy (1996), several programmes have been expanded or developed including a three-year alcohol awareness campaign (2000-2003) *LESS IS MORE*. There has been research to evaluate the economic costs of alcohol problems, training programmes and greater enforcement of drink driving laws. The Strategic Task Force on Alcohol was set up in January 2002 by the Minister of Health and Children and has published an interim report.

5.52

The second SLÁN survey was completed during 2002 and the results will be available in April / May 2003. The development of health promotion programmes in the areas of diet and physical activity will have a positive impact on promoting healthy blood pressure levels.

5.53 **(2002)**

The Nutrition Sub-committee of the Food Safety Authority of Ireland has started to discuss what action is appropriate to reduce the population's salt consumption.

5.54 **(2004)**

No national programme has been developed but the Irish Heart Foundation provides education about blood pressure as part of its community education programmes.

5.55 **(2003)**

A research project relating to the management of blood pressure has been commissioned with funding from the Strategy. The Irish Heart Foundation Council on High Blood Pressure advises on clinical practice on blood pressure measurement and treatment, as well as on the prevention of raised blood pressure.

5.56, 5.57 & 5.58 **(2001)**

All national media campaigns are subject to pre- and post-campaign research and evaluation. The Health Promotion Unit in conjunction with the health Authority / boards is compiling a set of performance indicators for health promotion that will also apply to Cardiovascular Health Strategy programmes.

Primary Care

6.1, 6.2 6.3 & 6.4 **(6.1, 6.2, 6.4 - 2001) (6.2 - 2004)**

52 additional public health nurses (PHNs) and nurse facilitators were recruited during the first three years of implementation and additional funding was allocated for their training. Many PHNs have completed training for brief intervention in lifestyle issues. With the commencement of *Heartwatch* from 1 October 2002 each health board is recruiting nurse facilitators to work exclusively on promoting heart health, in co-operation with PHNs and practice nurses. Health promotion staff are providing support to nurse facilitators and practice nurses as part of the *Heartwatch* programme.

6.5 **(2004)**

General practitioners contribute in a variety of ways to health promotion initiatives at local level. This is being enhanced with the introduction of *Heartwatch*.

6.6 **(2001)**

Links between general practitioners, GP Units and health promotion departments are being strengthened with the commencement of *Heartwatch* from 1 October 2002.

6.7 **(2002)**

The European recommendations for prevention of cardiovascular disease in clinical practice have been accepted as the basis for the *Heartwatch* programme.

6.8 to 6.10 **(2004)**

The *Heartwatch* programme for secondary prevention in patients with symptomatic disease has been prioritised, in line with European recommendations. The experience gained will contribute to the establishment of a programme for the detection and management of those at high risk of cardiovascular disease.

6.11 **(2001)**

The promotion of practice registers has not been addressed directly in the implementation of the Cardiovascular Health Strategy. However, the implementation of *Heartwatch* is expected to contribute to the development of computerisation in general practice.

6.12 to 6.17 **(2004)**

The *Heartwatch* programme for secondary prevention in patients with symptomatic disease has been prioritised, in line with European recommendations. The experience gained will contribute to the establishment of a programme for the detection and management of those at high risk of cardiovascular disease.

6.18 **(2001)**

Sixteen community dietitians have been employed to provide services in the community and in general practice. Several health boards have provided training for GPs and PHNs on supporting behaviour change for heart healthy lifestyles. With the *Heartwatch* programme, linkages will be strengthened between GPs, other community based professionals and health promotion staff.

6.19 & 6.20 **(2004)**

Communications between occupational health services and mobile risk assessment clinics and general practice has not been addressed yet.

6.21 to 6.26 **(2002)**

Being addressed with the introduction of the *Heartwatch* programme. This is the initial phase of a National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease and commenced on 1 October 2002.

The aim of *Heartwatch* is to implement and evaluate the first phase of a structured programme of secondary prevention of cardiovascular disease in general practice in Ireland. During the initial phase about 14 000 patients will be treated by approximately 440 GPs throughout the country. All patients (GMS and private) on a participating GP's list with a history of the following are eligible for the first phase and are being invited to join the programme:

- proven myocardial infarction,
- coronary artery bypass graft, or
- percutaneous transluminal coronary angioplasty or percutaneous coronary intervention.

Patients will be offered lifestyle advice as well as monitoring of risk factors and medication.

6.27 & 6.28 **(2001)**

Funding has been allocated to the Smoking Target Action Group for brief intervention training for health professionals to support clients to quit smoking. As part of *Heartwatch*, further training programmes are being developed to assist health professionals support clients.

6.29 **(2001)**

NRT is available free of charge to all GMS patients from 1 April 2001.

6.30 **(2001)**

An additional 26 smoking cessation officers have been employed under the Strategy and are providing an expanded smoking cessation service. Many of these officers link with community based staff, including PHNs, when organising smoking cessation meetings or clinics.

6.31 **(2001)**

There is a national smoking quitline, funded through the Cardiovascular Health Strategy and managed by the Irish Cancer Society.

6.32 **(2001)**

The Tobacco Task Force established in 2002 under the Office of Tobacco Control will have responsibility for producing an annual report on tobacco control.

6.33 to 6.43 **(6.33-6.35, 6.37-6.42 - 2001) (6.36, 6.43 - 2004)**

Funding has been allocated to STAG for brief intervention training for health professionals to support clients quit smoking. As part of *Heartwatch*, education materials and further training are being developed to assist health professionals support clients in this as well as in other areas of lifestyle health promotion, such as nutrition, managing stress and alcohol.

With increased resources allocated to health promotion, additional and appropriate materials on the range of lifestyle topics have been produced and distributed to GPs. All materials are written having regard to levels of literacy in the community.

In relation to physical activity, GP Exercise Referral programmes were piloted in the Mid-Western Health Board and the Southern Health Board. A national framework through which GP Exercise Referral can be developed has also been agreed.

6.44 & 6.46 **(2004)**

See 6.8 above re the pilot project on risk assessment.

6.45 **(2001)**

A research grant has been awarded for the development and evaluation of an audit tool for the management of high blood pressure in general practice. This will contribute to knowledge about why a proportion of those identified as having high blood pressure are not receiving adequate follow-up, counselling and treatment.

6.47 **(2001)**

The basis for a monitoring system for secondary prevention in general practice will be in place with the implementation of the *Heartwatch* programme.

6.48 & 6.49 **(2002)**

On the advice of the Advisory Forum on Cardiovascular Health, the development of clinical guidelines will be led by the Irish Cardiac Society, working with other professional groups as appropriate. The Irish College of General Practitioners will be the lead organisation for clinical guidelines for secondary prevention.

6.50 **(2002)**

Hospital supports for GPs caring for patients with chronic cardiovascular disease have been increased. Community and hospital smoking cessation and nutrition services have been expanded. There is increased direct access to diagnostic tests, such as echocardiography, direct referral to a chest pain clinic in some hospitals, and hospital-based heart failure nurses provide support for patients in the community in a number of locations.

6.51 **(2003)**

See 6.48 above.

6.52 **(2003)**

A number of local audits have been done on time to thrombolysis. These, along with the experience of pilot projects on the provision of immediate care by general practitioners, will form a basis for guidelines on the provision of thrombolysis and defibrillation by GPs.

6.53 to 6.55 **(2002)**

The Department of Health and Children, the health boards, the Irish College of General Practitioners and the Irish Heart Foundation have worked in partnership to implement the recommendations in the Cardiovascular Health Strategy. *Heartwatch* has arisen from this partnership. This provides a basis for a quality initiative on the care of patients with cardiovascular disease in GP settings.

Pre-hospital Care

7.1 **(2001)**

The Pre-Hospital Emergency Care Council (PHECC) was established in 2000.

7.2, 7.3 & 7.4 **(2002)**

All health boards have assessed their information systems and clinical audit programmes. This has improved response times for cardiac emergencies.

7.5 to 7.10 **(7.5, 7.6 - 2003) (7.7-7.10 - 2002)**

The Irish Heart Foundation completed a review of CPR programmes. Six additional resuscitation training officers have been recruited and have enhanced the provision of community CPR programmes. Programmes have been provided in partnership with a large number of community and voluntary organisations. Some health boards have developed first responder schemes, notably the North Western Health Board, Southern Health Board and the Western Health Board.

7.11 **(2001)**

A major upgrading of ambulance equipment has been completed with Strategy funding and every ambulance is now equipped with an AED. The vast majority of ambulance personnel have been trained in their use.

7.12 **(2003)**
The Donegal Pre-hospital Emergency Care Project has been extended to Sligo / Leitrim. The Donegal experience has been used to establish a project in the Southern Health Board.

7.13 **(2003)**
BLS and ACLS training have become widely available to all health professionals through the Strategy, in community, pre-hospital and hospital settings. Some boards have developed first responder schemes, notably the North Western Health Board, Southern Health Board and the Western Health Board.

7.14 **(2001)**
The Department of Health and Children has consulted with PHECC on the enactment of this legislation. The introduction of the EMT-A post is expected in March 2003 allowing for the administration of certain drugs by these grades.

7.15 **(2003)**
The IHF undertook an examination of ACLS training in 2000. Access to ACLS training has been improved substantially. In the Southern Health Board, ACLS training has been provided to GPs involved in the first responder scheme.

7.16 **(2003)**
The standard of a 'call to needle time' of 90 minutes is widely accepted. Several local projects to measure call to needle time involve the pre-hospital and hospital sectors.

7.17 **(2003)**
As part of the Southern Health Board first responder scheme in Dingle, the implications of introducing pre-hospital thrombolysis are being considered.

7.18 **(2002)**
Protocols for the administration of aspirin have been drawn up by PHECC and incorporated into EMT training.

Hospital Services

8.1 **(2001)**
21 additional hospital based resuscitation training officers (RTO) were recruited with funding from the Cardiovascular Health Strategy. All health boards have at least one RTO in their area.

8.2 **(2003)**
Education materials are available through the Irish Heart Foundation (IHF) on how and what steps to take after the onset of symptoms of heart attack. This information is disseminated by the IHF through its work in the community. Community based CPR training as well as advice in cardiac rehabilitation and heart failure clinics highlight the benefits of taking aspirin soon after the onset of symptoms.

8.3 **(2003)**
As 7.16 above.

8.4 **(2001)**
Advancements within the pre-hospital care area, such as 12 lead ECG telemetry, local clinical audits and changed practice procedures have been shown to reduce the time to thrombolysis in a number of locations.

8.5 **(2004)**
In 2002 a research grant was awarded for a national study of the care of patients with acute coronary syndromes.

8.6 **(2001)**
All health boards have discussed issues relating to the efficient administration of aspirin and thrombolysis to patients with suspected myocardial infarction. Some boards have developed and implemented local protocols of care.

8.7 & 8.8 **(2003)**
A number of heart failure services have been developed. These provide support for patients post-discharge, as well as follow-up in special clinics and liaison with general practice. 50 professionals involved in the care of patients with heart failure have received training with Strategy funding. Research has been commissioned on the management of heart failure in Ireland.

8.9 to 8.13 **(8.9, 8.12 - 2001) (8.10 - 2002) (8.11 - 2003) (8.13 - 2004)**
The recommendations on secondary prevention have been addressed by the appointment of staff to expand nutrition, smoking and health promotion services in hospitals. The expansion of cardiac rehabilitation services, including Phase I in hospitals, has greatly increased the support for lifestyle changes and for management of risk factors and medications. Patients who have had a coronary event or intervention are transferred to the *Heartwatch* programme in general practice. Guidelines for patient care are being developed as part of that programme.

8.14 **(2001)**
The Advisory Forum on Cardiovascular Health advised that a working group be established to prepare a national plan for the development of consultant cardiology services. The Joint Working Group to Review Consultant Cardiology Requirements was appointed in 2000 and is chaired by a representative of Comhairle na nOspidéal. Consultant staffing is being reviewed to identify shortfalls in consultant cardiology posts nationally and regionally.

The Joint Working Group submitted an interim report in May 2001 setting out the location of 25 priority consultant posts. In 2002, Strategy funding provided for 9 additional consultant cardiologists. With the funding available in 2003 a further 8 consultant cardiologist appointments are expected, ensuring the appointment of at least one additional consultant post per health board.

The final report of the Joint Working Group is due by mid-2003. This will address a number of other recommendations in the Strategy.

8.15 **(2002)**

An additional 127 CCU nurses and other specialist nursing staff have been employed. As well as supporting increased activity levels in CCUs, better staffing levels improves quality of care, and increases time for communication and patient education, and for staff training. The equipment of many CCUs has been upgraded with Strategy funds and the number of CCU beds has been increased.

8.16 **(2003)**

Most health boards have completed their discussions on reducing time to thrombolysis and many now have protocols in place. The introduction of 12 lead ECG telemetry by many boards has been an important development, giving advance warning to hospital personnel that the patient will require assessment for thrombolysis.

8.17 **(2001)**

Chest pain assessment units for acute chest pain have been developed in a number of hospitals with Strategy funding. Some hospitals now provide a clinic for patients with chest pain in need of timely access to out-patient services.

8.18 & 8.19 **(2001)**

Cardiac investigation areas have been improved in several hospitals and equipment purchased. Health boards have prioritised the development of echocardiography facilities, equipment has been purchased and staff employed in many hospitals. Improved diagnostic services have also reduced the waiting times for other cardiac investigations. In some hospitals, the expansion has facilitated direct referral by GPs for diagnostic tests, to agreed guidelines. See 8.14 re consultant staffing.

8.20 to 8.24 **(8.22, 8.23 - 2001)**
(8.20, 8.21, 8.24 - 2004)

See 8.14 and 8.18 re consultant staffing and service developments for diagnostic tests and procedures. In addition 81 additional cardiac technicians have been employed with funding from the Strategy, improving access to non-invasive cardiac diagnostic tests.

There has been a substantial increase in the number of angiography procedures carried out annually. The NWHB employs a mobile catherisation laboratory, two days a fortnight. It has provided about 600 angiographies since commencing in 2000. It is expected that other regional angiography services will be developed with the appointment of consultant cardiologists.

8.25 to 8.31 **(8.25, 8.28, 8.29, 8.31 - 2004)**
(8.26, 8.27, 8.30 - 2003)

See 8.14 re consultant staffing and service developments for invasive cardiac procedures, including cardiac pacing and electrophysiology. Additional nursing and technical staff have been employed in centres providing interventional cardiology and there has been a substantial increase in the number of coronary interventions, such as angioplasty and stent.

The number of pacemaker insertions has increased and pacemaker services will be expanded with the appointment of additional consultant cardiologists in regional centres.

8.32 **(2003)**

The Irish Cardiac Society has identified priorities for the development and implementation of clinical guidelines, namely acute coronary syndromes, heart failure and electrophysiology.

8.33 **(2003)**

All health boards have developed regional structures, with dedicated support staff, to oversee the implementation of the Cardiovascular Health Strategy. Regional committees are multidisciplinary and many have sub-committees to address specific patient care topics. The expansion of cardiac rehabilitation and the development of the *Heartwatch* programme clarifies responsibilities for secondary prevention after a coronary event.

8.34 **(2001)**

See 8.14 above re service developments, including referral arrangements for invasive diagnostic tests and procedures.

8.35 **(2001)**

The Eastern Regional Health Authority has completed a review of catherisation laboratory services in the region. This will provide a basis for future planning and delivery of cardiology services.

8.36 & 8.37 **(2003)**

See 8.14 above re consultant staffing, including for paediatric cardiology and services for adults with congenital heart disease.

8.38, 8.39 & 8.40 **(8.38 & 8.39 - 2003 (8.40 - 2002)**

See 8.14 re consultant cardiologist staffing.

8.41 to 8.43 **(2001)**

328 additional staff have been employed in the hospital services with Cardiovascular Health Strategy funds. This has increased the nursing complement and clerical support for cardiac services. See also 8.20 to 8.24 above re additional technical staff.

8.44 **(2003)**

The CHAIR project commenced in the autumn of 2002, piloted in the SHB. See also progress on recommendations in chapter 10.

8.45 **(2004)**

See 8.14 above re review of consultant cardiology staffing, which is considering the issue of dedicated time for clinical audit and continuing medical education.

Cardiac Rehabilitation

9.1 to 9.10 **(9.1-9.6, 9.8, 9.10 - 2001) (9.7 - 2003) (9.9 - 2004)**

Structured Phase I and Phase II cardiac rehabilitation services are in place in most hospitals that treats patients with heart disease (9.1, 9.6 and 9.7). Phase III is available in 29 hospitals, compared to 12 in 1998 and Phase IV is being developed in a small number of centres (9.8 and 9.9).

Programmes are multidisciplinary (9.2) and the appointment of additional consultant cardiologists will ensure that in the future they are consultant led (9.3).

The Health Services Employers Agency is considering the appropriate career structure for cardiac rehabilitation co-ordinators, (9.4). Research has been funded under the Strategy to achieve a national consensus on the format of a cardiac rehabilitation audit system for Ireland (9.5).

Minor capital funding from the Strategy allowed many hospitals acquire or develop extra space to facilitate the introduction or expansion of a cardiac rehabilitation service and provided or replaced equipment to support the expansion of services (9.10).

Information Systems, Audit and Research

10.1, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15 & 10.16 **(10.11 & 10.12 - 2001) (10.1 & 10.14 2002) (10.9, 10.10, 10.13, 10.15 & 10.16 - 2003)**

These recommendations relate to sources of data not currently collected or utilised for cardiovascular disease surveillance. The National Cardiovascular Information Systems (NCIS) Steering Committee has been established with a remit to oversee the pilot of the Coronary Heart Attack Ireland Register (CHAIR) project (a coronary care register) and to advise on the implementation of a comprehensive cardiovascular health information system.

CHAIR is being piloted in the Southern Health Board. After evaluation, it is expected that it will be extended to all hospitals caring for patients with acute coronary syndromes.

The NCIS Steering Committee has prioritised the development of additional modules for a cardiovascular health information system. The merits of an angiography register are being further discussed and a data module is being developed for percutaneous coronary interventions (PCI). Discussions are planned with cardiothoracic surgeons to re-establish the Irish Cardiac Surgery Register.

To date, discussions by the NCIS Steering Committee have not prioritised record linkage between the angiography, PCI and adult surgery registers. Other potential data sources have been given some consideration. Access to GMS prescription data for cardiovascular drugs has been provided by the Pharmacoeconomic Unit, Trinity College, based at St. James's Hospital. There are no plans at this time to track a cohort of patients or to implement a population-based register of coronary heart disease and stroke.

10.2, 10.3, 10.4 & 10.5 **(2004)**

These recommendations relate to the accuracy and timeliness of cardiovascular disease mortality data. Medical personnel report the cause of death on the death certificate. The Central Statistics Office classifies and codes the cause of death and publishes the Annual Report on Vital Statistics. Non-consultant hospital doctors receive training in the completion of death certificates. To date there have not been any specific initiatives to improve the quality of coding of cardiovascular disease by medical personnel.

10.6, 10.7 & 10.8 **(2004)**

These recommendations relate to the Hospital In-Patient Enquiry (HIPE). Coding staff receive training on an ongoing basis to ensure the accuracy of the HIPE data. To date there have not been any specific initiatives to improve the accuracy of the coding of cardiac conditions and procedures.

10.17, 10.18 & 10.19 **(2003)**

SLÁN (Survey of Lifestyles, Attitudes and Nutrition) was repeated in 2002 and publication of the results is expected in April / May 2003. There has not been any large-scale health behaviour survey of vulnerable groups. The Health Behaviour in School Children survey methodology is in use internationally. This survey has been repeated in Ireland to coincide with SLÁN in the adult population.

10.20 **(2002)**

The *Heartwatch* programme for secondary prevention in general practice will stimulate review of clinical practice to maximise the proportion of patients achieving targets for risk factors and medication. Developments with Cardiovascular Health Strategy funding have stimulated a number of clinical audit initiatives in hospitals. This has been facilitated by the appointment of cardiovascular researchers in several health boards. A foundation for clinical audit is being laid with the implementation of clinical guidelines and the planned cardiovascular health information systems. Research funds have been provided to develop a national audit system for cardiac rehabilitation.

10.21 **(2001)**

Proposals were invited in 2001 for cardiovascular research grants. Researchers were encouraged to submit proposals on the research priorities identified in the Cardiovascular Health Strategy. After expert assessment, five projects were funded. Two of these involved national projects - a survey of patients presenting with acute coronary syndrome and the development of a national audit system for cardiac rehabilitation services.

The Advisory Forum on Cardiovascular Health is preparing a research strategy for the Cardiovascular Health Strategy.

Appendix B
Terms of Reference and Membership of National and Regional Implementation Structures

National Implementation Structures

Heart Health Task Force

Terms of Reference

The Heart Health Task Force, gives overall direction and impetus to the implementation and review of the Cardiovascular Health Strategy and in particular to:

- take measures to ensure that momentum is maintained in the implementation, review and evaluation of cardiovascular health policy in line with the recommendations of the report of the Cardiovascular Health Strategy Group;
- review short, medium and long-term objectives proposed by the various Government Departments and other statutory bodies charged with achieving timely and co-ordinated implementation of detailed elements of the Cardiovascular Health Strategy;
- report to a Ministerial sub-group chaired by the Minister for Health and Children, on a quarterly basis; and
- submit an annual progress report to the Joint Oireachtas Committee on Health and Children.

The role of the Task Force is also to maintain momentum, review short, medium and long-term objectives, and to prioritise the implementation programme.

Membership and alternates of the Heart Health Task Force

Chair
Dr. John Bowman

Mr. Michael Kelly, *Secretary General*
Dr. Jim Kiely, *Chief Medical Officer*

Department of Finance
Mr. Tom Considine, *Secretary General*
Mr. Joe Mooney, *Principal Officer (alternate)*

Department of Social, Community and Family Affairs
Mr. John Hynes, *Secretary General*
Ms. Alice O'Flynn, *Assistant Principal (alternate)*

Department of Education and Science
Mr. John Dennehy, *Secretary General*
Mr. Brian Power, *Assistant Principal (alternate)*

Department of Arts, Sport and Tourism
Ms. Margaret Hayes, *Secretary General*
Mr. Paddy Heffernan, *Principal Officer (alternate)*

Department of the Environment and Local Government
Mr. Niall Callan, *Secretary General*
Mr. Tom O'Mahony, *Assistant Secretary (alternate)*

Department of Agriculture, Food and Rural Development
Mr. John Malone, *Secretary General*
Ms. Maura Nolan, *Principal Officer (alternate)*

Chair of Advisory Forum on Cardiovascular Health
Dr. Jane Wilde, *Institute of Public Health*

Health Boards
Dr. Sheelah Ryan, *CEO, Western Health Board*
Mr. Sean Conroy, *Regional Manager, Western Health Board (alternate)*
Mr. Pat Donnelly, *CEO, South Western Area Health Board*

City and County Managers
Mr. Derek Brady, *County Manager, Dunlaoire/Rathdown Co. Council*
Mr. Eddie Breen, *City Manager & Town Clerk, Waterford Corporation*

Voluntary Sector
Ms. Maureen Mulvihill, *Irish Heart Foundation*
Prof. Luke Clancy, *ASH Ireland*

Trade Unions
Mr. David Begg, *General Secretary, ICTU*
Mr. Robert Grier, *Chief Executive Officer, IBEC/CBI, Joint Business Council*
Dr. Pat Wall, *Chief Executive, Food Safety Authority of Ireland*

Academic interest
Prof. Cecily Kelleher, *NUI Galway*

Economist
Prof. Brendan Whelan, *Director, ESRI*

Public interest
Mr. Joseph McDonagh, *former President GAA*
Mr. Michael Doyle, *Veterinary Surgeon, Managing Director of Biojen International*
Mr. John Treacy, *Chief Executive, Irish Sports Council*
Ms. Fiona Coyne, *Irish Sports Council (alternate)*

In attendance from the Department of Health and Children
Mr. Chris Fitzgerald, *Principal Officer*
Dr. Emer Shelley, *National Heart Health Advisor*
Mr. Brian Brogan, *Assistant Principal*
Ms. Cathy Lyons, *Higher Executive Officer*
(replaced Ms. Patsy Carr, *Higher Executive Officer*)
Ms. Oilbhe O'Donoghue, *Executive Officer*
(replaced Mr. Paul Flanagan, Executive Officer)

Advisory Forum on Cardiovascular Health

Terms of Reference

- To advise the National Heart Health Task Force on
  - best practice in cardiovascular disease prevention, detection, treatment and rehabilitation,
  - the evaluation of the effectiveness and quality of cardiovascular services, and
  - the co-ordination of research into cardiovascular disease.

- To advise the Department of Health and Children
  - in considering major issues that arise from the implementation of the Strategy, and
  - on the development and implementation of protocols for the treatment and care of cardiovascular patients.

Membership of Advisory Forum on Cardiovascular Health

Dr. Jane Wilde, *Director, Institute of Public Health, Chair*
Prof. John H. Horgan, *Consultant Cardiologist, Beaumont Hospital, Dublin*
Mr. Aonghus O'Donnell, *Cardiothoracic Surgeon,*

University Hospital Cork
Prof. Michael Walsh, *Consultant Cardiologist, St. James's Hospital, Dublin*
Dr. Eibhlín Connolly, *Deputy Chief Medical Officer, Department of Health and Children*
Dr. Sean Denyer, *Director of Public Health, North Western Health Board*
Prof. Andrew Murphy, *Department of General Practice, NUI, Galway*
Dr. Kieran Harkin, *General Practitioner, Grattan Medical Centre, Inchicore, Dublin*
Mr. John Lahiff, *Co-ordinator of Health Promoting Schools, Marino Institute of Education, Dublin*
Ms. Dolores Gallagher, *Assistant Director of Public Health Nursing, North Western Health Board*
Prof. Hannah McGee, *Health Services Research Centre, Royal College of Surgeons in Ireland, Dublin*
Ms. Sharon Foley, *Health Promotion Manager, Midland Health Board (resigned, May 2002)*
Ms. Carmel Mangan, *Director of Nursing, Blackrock Clinic, Dublin*

In attendance from the Department of Health and Children
Mr. Chris Fitzgerald, *Principal Officer*
Dr. Emer Shelley, *National Heart Health Advisor*
Mr. Brian Brogan, *Assistant Principal*
Ms. Christine Brennan, *Higher Executive Officer (replaced Ms. Patsy Carr, Higher Executive Officer)*
Ms. Oilbhe O'Donoghue, *Executive Officer (replaced Ms. Ursula O'Hanlon, Executive Officer)*

National Cardiovascular Information Systems Steering Committee

Terms of Reference

The National Cardiovascular Information Systems Steering Committee (NCIS) oversees and provides national impetus to the CHAIR project and to the implementation of cardiovascular health information systems.

Its terms of reference in relation to CHAIR are to:

- agree the scope of the data to be gathered,
- agree the mechanism for the collection of this data taking account of appropriate international data sets and developments relevant to the CHAIR project,
- agree the terms for monitoring outcomes and criteria for evaluating the pilot project,
- advise on the national roll-out of the CHAIR project to all health boards, assuming its successful implementation according to agreed criteria in the Southern Health Board during the pilot phase,
- work through and with the Project Manager of the Southern Health Board CHAIR Project,

Its terms of reference in the broader context are to:

- advise and undertake other work as requested by the Minister for Health and Children,
- advise on the implementation of cardiovascular health information systems, as set out in the Cardiovascular Health Strategy Report *Building Healthier Hearts*. A priority in this context is to oversee a review of national and international data sets, and
- establish formal links with the implementation structures of the Cardiovascular Health Strategy including the Advisory Forum on Cardiovascular Health.

The NCIS developments in the immediate term are cognisant of the National Health Information Strategy, when published, and that it will be required to conform to structures and guidelines developed on foot of its recommendations in the longer term.

Membership of National Cardiovascular Information Systems Steering Committee
Dr. Peter Kearney, *Consultant Cardiologist, University College Hospital, Cork,* ***Chair***
Dr. Kevin Walsh, *Consultant Paediatric Cardiologist, Our Lady's Hospital for Sick Children, Crumlin*
Dr. Brian O'Herlihy, *Department of Public Health, Eastern Regional Health Authority*
Dr. Brian Maurer, *Consultant Cardiologist, St.Vincent's Hospital, Dublin 4 and President, Irish Heart Foundation*
Mr. Vincent Young, *Cardio thoracic Surgeon, St James's Hospital, Dublin 8*
Dr. Mary Codd, *Epidemiologist*
Ms. Anne Gallagher / Ms. Anne Raleigh, *Nurses Cardiovascular Association*
Ms. Wendy Keena, *Cardiovascular Health Strategy Project Manager, Southern Health Board*
Dr. Pat Sullivan, *Chair of the Southern Health Board CHAIR Pilot Project Committee*
Prof. Leslie Daly, *Department of Public Health Medicine and Epidemiology, UCD*
Dr. Emer Shelley, *National Heart Health Advisor*
Mr. Hugh Magee, *Senior Statistician, Information Management Unit/National Health Information Strategy, Department of Health and Children*
Mr. Chris Fitzgerald, *Principal Officer, Health Promotion Unit, Department of Health and Children*
Mr. Harry Harris, *Assistant Principal Officer, Acute Hospitals Section, Department of Health and Children*

In attendance from the Department of Health and Children
Ms. Christine Brennan, *Higher Executive Officer,*
Ms. Oilbhe O'Donoghue, *Executive Officer,*

Joint working Group to Review Consultants Cardiology Requirements

Terms of Reference

- To review existing service provision and identification of shortfall at national and regional level in total complement of consultant cardiologist posts.
- Identification of hospitals suitable for designation as regional centres having regard to the relevant Strategy recommendations and taking demographic and geographic considerations and the location of tertiary care centres into account.
- The development of a national plan outlining formal referral links to regional and tertiary centres from all acute hospitals not providing a specialist service.
- Make recommendations regarding the prioritisation of developments over a 5-year period having regard to the quality standards and issues of regional variations in equity of access to consultant-led services identified in the Strategy document.
- Arising from the above, develop a national plan for the orderly development of consultant-led services nationally.

Membership of Joint Working Group to Review Consultant Cardiology Requirements
Comhairle na nOspidéal
Dr. Tom Peirce, *Consultant Physician,* ***Chair***
Mr. Tommie Martin, *Chief Officer*
Mr. Maurice Neligan, *Consultant Cardiothoracic Surgeon*

Appendix B

Advisory Forum on Cardiovascular Health
Prof. John H. Horgan, *Consultant Cardiologist*
Mr. Aonghus O'Donnell, *Consultant Cardiothoracic Surgeon*
Prof. Michael Walsh, *Consultant Cardiologist*

Department of Health and Children
Dr. Eibhlín Connolly, *Deputy Chief Medical Officer*
Mr. Joseph Cregan, *Principal Officer*
Mr. Brian Brogan, *Assistant Principal*
Dr. Emer Shelley, *National Heart Health Advisor*

Eastern Regional Health Authority
Dr. Siobhan Jennings, *Specialist in Public Health Medicine*

Secretary to the Joint Working Group
Ms. Audrey Cunningham, *A/Administrator, Comhairle na nOspidéal*

National Steering Committee for Heartwatch The Initial Implementation Phase of a National Programme in General Practice for the Secondary Prevention of Cardiovascular Disease

Terms of Reference

Oversee the initial implementation of the national programme, including:

- The establishment of the National Programme Centre.
- The recruitment of a Programme Director (Medical) and Programme Manager/ Administrator and other staff to the National Programme Centre.
- The establishment of an Independent Data Centre, including the appointment of the Data Management Committee.
- Develop clear and structured communication links with the Data Management Committee and ensure communication structures are in place between the Independent Data Centre and all key stakeholders.
- Advise the Department of Health and Children on the allocation of available resources towards submitted plans from all stakeholders.
- Commission independent evaluation of the initial phase to include recommendations for the continuation and/or expansion of the national programme after the initial phase.

Membership of National Steering Committee for Heartwatch

Chair
Prof. John Feely, *Department of Pharmacology and Therapeutics, Trinity College*

Department of Health and Children
Mr. Chris Fitzgerald, *Principal Officer*
Dr. Eibhlín Connolly, *Deputy Chief Medical Officer*

Irish College of General Practitioners
Dr. Richard Brennan, *President*
Dr. Michael Boland, *Director of the Postgraduate Resource Centre*

Health Boards
Mr. Pat Donnelly, *CEO, South Western Area Health Board*
Dr. Declan Bedford, *Public Health Specialist, North Eastern Health Board*

Irish Medical Organisation
Dr. James Reilly, *Chairman of GP Committee*

Irish Heart Foundation
Dr. Vincent Maher, *Medical Advisor*

Practice Nurse Association
Ms. Rita Callally, *Practice Nurse*

In attendance

Department of Health and Children
Mr. Brian Brogan, *Assistant Principal*
Ms. Cathy Lyons, *Higher Executive Officer*

National Programme Centre
Dr. Sean Maguire, *Director*
Mr. John Leahy, *Manager*

Independent Data Centre
Mr. Tom Cahill, *Data Contoller*
Ms. Carolann O'Shea, *Events Monitor*

GPIT
Ms. Maria O'Brien, *GPIT (until January 2003)*

Interdivisional Working Group on Cardiovascular Health

Terms of Reference

- To devise an action plan arising out of National Conference.
- To facilitate linkages between the Advisory Forum, Task Force and other national implementation committees.
- Agree a mechanism for distribution of cardiovascular health budget.

Membership of Interdivisional Working Group on Cardiovascular Health

Mr. Chris Fitzgerald, *Principal Officer, Health Promotion Unit,* ***Chair***
Dr. Emer Shelley, *National Heart Health Advisor*
Dr. Eibhlín Connolly, *Deputy Chief Medical Officer*
Dr. Chris McNamara, *GP Medical Officer, Primary Care*
Mr. Denis O'Sullivan, *Principal Officer, Acute Hospitals*
Mr. Tony Morris, *Principal Officer, Hospital Planning Office*
Ms. Fiona Prendergast, *Assistant Principal, Finance Unit*
Mr. Kilian McGrane, *Assistant Principal, Personnel, Development and Management Unit*
Mr. Hugh Magee, *Senior Statistician, Information Management Unit*
Mr. Paul Fay, *Assistant Principal, General Medical Services*
Mr. Harry Harris, *Assistant Principal, Acute Hospitals*
Mr. Brian Brogan, *Assistant Principal, Health Promotion Unit*
Ms. Christine Brennan, *Higher Executive Officer, Health Promotion Unit*
Ms. Oilbhe O'Donoghue, *Executive Officer, Health Promotion Unit*

Regional Implimentation Steering Committees

Eastern Regional Health Authority

Remit of group

To advise on the formulation, monitoring and evaluation of a Cardiovascular Health Strategy Implementation Programme (Action Plan), guided by *Building Healthier Hearts* recommendations, which meet the needs of the population it serves.

Membership

Dr. Siobhan Jennings, *Specialist in Public Health Medicine,* ***Chair***
Ms. Bernadette Kiberd, *Project Manager*
Mr. Jim Breslin, *Director of Planning*
Ms. Louise McMahon, *Senior Commissioner*

Ms. Mo Flynn, *Senior Commissioner*
Mr. Tom Finn, *Senior Commissioner*

From the Area Health Boards
Dr. Jane Renehan, *CVHS Project Manager*
Mr. Gerry Hanley, *Operations Manager*
Ms. Niamh O'Rourke, *CVHS Project Manager*
Ms. Mary O'Connell, *Director of Acute Services & Primary Care*
Dr. Richard Aboud, *General Practitioner*
Ms. Siobhan Fitzpatrick, *CVHS Project Manager*
Ms. Martina Queally, *Director of Health Promotion*
Ms. Pauline Bryan, *Director of Primary Care Acute Services*

From the Dublin Academic Teaching Hospitals
Ms. Helen Newton, *Senior Cardiac Rehabilitation Co-ordinator*
Dr. Peter Crean, *Consultant Cardiologist*
Dr. Brian Maurer, *Director of Cardiology*
Ms. Joan Love, *Cardiology Sister*

Multisectoral Representation
Dr. Geoff King, *Pre-Hospital Emergency Care Council*
Dr. John O'Brien, *Irish College of General Practice*
Ms. Siobhan McGrory, *National Youth Council of Ireland*
Mr. Michael O'Shea, *Irish Heart Foundation*
Ms. Doreen Bracken, *Irish College of Trade Union (Voluntary Pillar)*
Dr. Margaret Fitzgerald, *Food Safety Authority of Ireland*
Mr. Karl Mitchell, *Dublin City Council*
Ms. Mary Hanlon, *Dublin City Council*
Ms. Deirdre Whitfield, *Wicklow County Council*
Mr. Willy Carroll, *Kildare County Council (who sadly passed away during 2002)*

Secretariat
Ms. Michelle Burns, *Administration Assistant*
Ms. Olivia Magee, *Administration Assistant*

Midland Health Board

Terms of Reference

In line with the recommendations of the National Strategy a multidisciplinary regional committee was put in place, under the chairmanship of the Director of Public Health, in order to oversee the further development and implementation of the action plan to reduce cardiovascular disease and its consequences in the Board's area (R8.33)

Membership

Dr. Pat Doorley, *Director of Public Health,* ***Chair***
Ms. Carmel Brennan, Project Manager, Cardiovascular Health Strategy
Dr. Sean Murphy, *Consultant Physician, Midland Regional Hospital at Mullingar*
Dr. John Connaughton, *Consultant Physician, Midland Regional Hospital at Portlaoise*
Dr. Paul Shiels, *Consultant Physician with Special Interest in Cardiology, Midland Regional Hospital at Tullamore*
Dr. Adrian Honan, *General Practitioner, Portarlington*
Dr. Siobhan Tempany, *General Practitioner, Longford*
Mr. Moss McCormack, *Principal Laboratory Technician, Midland Regional Hospital at Mullingar*
Ms. Kate Brickley, *Health Promoting Hospitals Co-ordinator*
Mr. John Bulfin, *General Manager, Acute Hospital Services*
Ms. Sheelagh Canavan, *Senior Physiotherapist-in-Charge, Midland Regional Hospital at Mullingar*
Ms. Eleanor Dowling, *Director of Public Health Nursing, Health Centre, Tullamore*
Mr. Philip Lane, *Chief Ambulance Officer*
Ms. Mary Mulvihill, *Dietitian, Midland Regional Hospital at Mullingar*
Ms. Maire Murray, *Clinical Nurse Specialist-Cardiac Rehabilitation, Midland Regional Hospital at Mullingar*
Ms. Ann Raleigh, *Clinical Nurse Specialist-Cardiac Rehabilitation, Midland Regional Hospital at Tullamore*
Ms. Finola Shiel, *Clinical Nurse Specialist-Cardiac Rehabilitation, Midland Regional Hospital at Portlaoise*
Ms. Patricia Regan, *Occupational Therapist, Midland Regional Hospital at Mullingar*
Mr. Matthew Mc Cann, *Regional Health Promotion Manager*
Ms. Grainne Nic Gabhann, *Project Manager, Primary Care Projects, Cardiovascular Health Strategy*
Mr. Pat Marron, *Administrator, Primary Care Unit*
Mr. Vincent Cronly, *Ambulance Officer*
Mr. Paddy Payne, *Assistant Staff Officer, Cardiovascular Health Strategy, Secretariat*

Former members of Cardiovascular Health Strategy Steering Committee

Ms. Sharon Foley, *Health Promotion Manager*
Dr. Tony Holohan, *Specialist Registrar in Public Health Medicine*
Dr. Patricia Callan, *Senior Area Medical Officer, Health Centre, Tullamore*
Ms. Elizabeth McCue, *Occupational Therapist, Athlone.*
Dr. Davida de la Harpe, *Specialist in Public Health Medicine*
Ms. Maria Leahy, *Senior Health Education Officer (Smoking Cessation)*
Dr. Melissa Canny, *Specialist Registrar in Public Health*
Dr. Emer O'Connell, *Senior Area Medical Officer*
Dr. Annette Rhattigan, *Specialist Registrar in Public Health Medicine*

Mid Western Health Board

Terms of Reference

- To contribute to the development of an action plan for the local delivery of the Cardiovascular Health Strategy in the Board.
- To develop protocols for patient care.
- To prioritise service development in line with the recommendations of the Strategy.
- To communicate progress / delays in the implementation of the Strategy.
- To oversee spending of Strategy funds.

Membership

Dr. Kevin Kelleher, *Director of Public Health,* Chair
Ms. Fionnuala O'Brien, *Project Co-ordinator*
Dr. Brendan Meany, *Consultant Cardiologis*t
Dr. Terence Hennessy, *Consultant Physician/Cardiologist*
Dr. John Kellett, *Consultant Physician*
Dr. Con Cronin, *Consultant Physician*
Mr. John Hennessy, *General Manager*
Mr. Tim Kennelly, *Chief Executive (St. John's Hospital)*
Ms. Julie Cotter, *Clinical Services Co-ordinator*
Mr. Seamus McNulty, *General Manager*
Mr. John Doyle, *Hospital Administrator*
Mr. Gus Sheehan, *General Manager*
Mr. Brian Neeson, *Health Promotion Manager*
Mr. Padraig Callaghan, *Chief Ambulance Officer*
Mr. Pat Daly, *Acting Chief Ambulance Officer*
Dr. Dave Boylan, *General Practitioner*
Dr. Tom McDonnell, *General Practitioner*
Ms. Joan Somers Meany, *Director of Nursing*
Ms. Maria Molloy, *Director of Public Health Nursing*
Ms. Michelle Doyle, *Cardiac Rehabilitation Co-ordinator*
Ms. Sheila Bowers, *Dietitian Manager*
Ms. Aine Collins, *Secretariat*

Appendix B

North Eastern Health Board

Terms of Reference

- To implement the Report of the Cardiovascular Health Strategy by:-
  - Examining the recommendations contained in the report.
  - Reviewing initiatives already being taken, or in process, by the Board.
  - Prioritising action for interventions in consultation with relevant personnel.
- To support the development of a high quality evidence based service in relation to cardiovascular disease in the North Eastern Health Board.
- To receive and consider reports, suggestions and comments from the Advisory Group.
- To make regular reports to the Chief Executive Officer regarding the implementation.

Membership

Dr. Rosaleen Corcoran, *Director of Public Health,* ***Chair***
Mr. Geoff Day, *A/Chief Executive Officer*
Dr. Declan Bedford, *Specialist in Public Health Medicine*
Ms. Mary Duff, *Director of Nursing*
Mrs. Aileen Maguire, *Director of Nursing*
Dr. Kate McGarry, *Consultant Physician*
Ms. Ann Marie Hoey, *A/Director of Primary Care*
Mr. David Gaskin, *General Manager*
Dr. Brendan McMahon, *Consultant Physician*
Dr. Nazih Eldin, *Regional Health Promotion Manager*
Ms. Cathleen Curry, *Director of Public Health Nursing*
Mr. Richard Bruton, *Regional Materials Management*
Ms. Olive Carolan, *Dietitian*
Ms. Karen Gunn, *Chief Physiotherapist*
Mr. Gerry Kelly, *Senior Executive Officer*
Mr. Gerry Clerkin, *Senior Executive Officer*
Mr. Hugh Reilly, *Senior Administrative Officer*
Ms. Marian Kiernan, *Regional Co-ordinator*
Ms. Patricia Maguire, *Cardiac Rehabilitation Co-ordinator*
Mr. Pat Grant, *Chief Ambulance Officer*
Ms. Kate Mulvenna, *Chief Pharmacist*
Ms. Bridie Pepper, *Senior Executive Officer*
Mr. Gerry Roddy, *Senior Executive Officer*
Ms. Emer Smyth, *Cardiovascular Facilitator*
Ms. Johann Hoey, *Cardiovascular Facilitator*
Ms. Karen Murphy, *Assistant Staff Officer*
Ms. Alice Gormley, *Senior Occupational Therapist*
Mr. Fran Thompson, *Director of Information Systems*
Ms. Eilish McKeown, *Senior Executive Officer*
Mr. John Leahy, *PHECC Project Manager*
Ms. Sinead Fitzgerald, *Secretary*

North Western Health Board

The North Western Health Board has established three working groups as set out below.

Health Promotion Working Groups Remit

- To work to implement relevant recommendations in the Cardiovascular Strategy.
- To act as the main liaison focus with other agencies within the region.
- To advise and monitor the work of other working groups in relation to health promotion.
- To ensure synergy with other health promotion activity and the general aim of re-orientating services to be more health promoting.

Membership

Ms. Bernie Hyland, ***Chair***
Ms. Rita O'Grady, *Senior EHO*
Mr. Paul Hume, *Director of Nursing*
Ms. Margaret Martin, *Research Officer*
Dr. Marie Prendergast, *Occupational Health Department*
Ms. Ann Nora Gallagher, *Consumer Representative*
Capt. Michael Mc Geehan, *Physical Activity Group*
Mr. Tony Kerins, *Social Welfare Services*
Ms. Brigid Mullen-Doherty, *Community Dietitian*
Ms. Anne Mc Ateer, *Youth & Children Development Officer*
Mr. Jim Lynch, *Sligo Council of Trade Unions*
Ms. Fionnuala Kerins, *Adult Education Officer*
Ms. Ann Hayden, *ICA*
Mr. Martin Shields, *Employee Relations Office*
Ms. Mary Friel, *Nurse Development Co-ordinator*
Ms. Dolores Gallagher, *Asst. Dir. Public Health Nursing*
Ms. Ultan Mulvihill, *Youthreach*
Ms. Brid English, *A/Health Promotion Officer*
Ms. Noeleen O' Donnell, *Information Officer*
Ms. Patricia Griffin, *Consumer Representative*
Mr. Liam Bergin, *Training & Development Officer*
Ms. Prannie Rhatigan, *General Practitioner*
Ms. Rosemary Walsh, *Sligo General Hospital*
Mr. David Simpson, *Health Promotion*
Ms. Geraldine Delorey, *A/Health Promotion Officer*
Ms. Anne Kinsella, *Youthreach*
Ms. Marie Mc Callion, *Development Officer Physical Activity*
Ms. Ann Marie Cross, *Development Officer*
Ms. Mary Kelly, *Health Promotion Co-ordinator*
Ms. Marion Doran, *Health Promotion Co-ordinator*
Ms. Chrisina Heffernan, *Staff Health Project Officer*
Ms. Siobhan Byrne, *Senior Environment Officer*
Ms. Donal Oscully, *Leitrim VEC*
Mr. Paul Kirkpatrick, *Administrative Officer*
Ms. Mary Conaghan, *ICA*
Mr. Michael Deignan, *Go For Life*
Ms. Deirdre Lavin, *Donegal Sports Partnership*

Past Members

Mr. Paul Hume, *Director of Nursing*
Ms. Emma Ball, *Nutritionist*
Dr. Trish Noonan, *GP*
Ms. Helen Kelly, *Public Health Nurse*
Mr. Michael Breen, *Donegal County Council*
Ms. Agnes Durkin-Boyle, *Public Health Nurse*
Ms. Anne Flood, *Nurse Development Co-ordinator*
Ms. Siobhan Hourigan, *Irish Heart Foundation*
Ms. Celia Keenaghan, *Senior Research Officer*
Mr. Michael Bourke, *VEC*
Ms. Janet Gaynor, *Manager Schools Programme*
Mr. Declan McIntyre, *FAI*
Mr. Joe McDonagh, *Consumer Representative*
Mr. Michael McLoone, *Donegal County Council*
Ms. Eithne White, *Nutrition Manager*

Remit of Pre-hospital Care, Hospital Services and Rehabilitation group

- To work to implement relevant recommendations in the Cardiovascular Strategy.
- To ensure the North West maintains its lead in developments in this area and continue to develop as a centre excellence.
- To advise and monitor the work of other working groups in relation to pre-hospital care, hospital services and cardiac rehabilitation.
- To ensure that the North West develops fair access to tertiary services.
- To explore the potential for development of cross border services.

Membership

Mr. Tom Daly, ***Chair***
Ms. Rosemary Walsh, *Cardiovascular Co-ordinator*
Ms. Janet Doherty, *Unit Nursing Officer*

Ms. Marian Doran, *Health Promotion Officer*
Ms. Joyce Hamilton, *A/UNO/SM*
Mr. Chris Lyons, *General Manager*
Mr. Francis Rogers, *General Manager*
Dr. Donal Murray, *Consultant Physician*
Ms. Jo Shortt, *Senior Executive Officer*
Dr. Peter Wright, *Specialist in Public Health Medicine*
Dr. John Dowling, *General Practitioner*
Dr. David Swann, *General Practitioner*
Dr. Liam Bannon, *Consultant Physician*
Mr. Tony Cummins, *Ambulance Operations Officer*

Past Members

Mr. Pat Guaghan, *Assistant CEO*
Ms. Kathleen Griffin, *Former Director of Nursing*
Ms. Sheila Smith, *Senior Executive Officer*
Ms. Geraldine Helly, *Unit Nursing Officer*
Mr. Kieran Doherty, *Senior Executive Officer*
Dr. Louise Doherty, *Specialist Registrar in Public Health*

Remit of Primary Care Group

- To work to implement relevant recommendations in the Cardiovascular Strategy.
- To ensure synergy with the Primary Care Strategy.
- To advise and monitor the work of other working groups in relation to primary care.

Membership

Mr. Tom Kelly, ***Chair***
Dr. Prannie Rhatigan, *Cardiovascular Strategy Co-ordinator*
Mr. Noel Scott, *Primary Care Development Officer*
Mr. Kieran Doherty, *General Manager*
Ms. Siobhan Masterson, *Project Manager*
Ms. Eileen M. Gallagher, *Cardiovascular Facilitator*
Ms. Maeve McDermott, *Cardiovascular Facilitator*
Ms. Ita Conroy, *Director of Planning*
Ms. Liz Martin, *Health Promotion Development Officer*
Ms. Mary Curran, *Director of Public Health Nursing*
Mr. John Hayes, *General Manager*
Ms. Caitriona Coleman, *Diabetes Services Development Co-ordinator*
Ms. Patricia Crocock, *Diabetes Services Development Co-ordinator*
Mr. Colin McCann, *Service Development Officer*
Dr. John Madden, *General Practitioner*
Dr. Paul Stewart, *General Practitioner*
Dr. David Swann, *General Practitioner*
Ms. Brid English, *Assistant Health Promotion Officer*
Ms. Margaret Headon, *Pharmacist*
Ms. Celia McGee, *Pharmacist*
Ms. Dolores Gallagher, *Assistant Director PHN*
Ms. Margaret Moran, *Resuscitation Training Officer*
Ms. Mairead McFadden, *Community Resuscitation Training Officer*

South Eastern Health Board

Scope

The South Eastern Health Board Regional Cardiovascular Steering Committee monitors the implementation of Cardiology projects in line with recommendations from the national Cardiovascular Health Strategy document, *Building Healthier Hearts* in a co-ordinated and equitable manner for the region.

Terms of Reference

The terms of reference of the Group are as follows:

- To review the burden of Cardiovascular Disease and in particular Coronary Heart Disease in the population of the South East.
- To review services for Coronary Heart Disease throughout the region spanning preventative, primary, secondary and tertiary services.
- To document the process of Coronary Heart Disease care for the general population, high-risk groups and patients who have had a cardiac event, throughout the region.
- To identify gaps and overlaps in the above services.
- To make recommendations for improving services and to identify opportunities for piloting these improvements.
- To develop and agree protocols of care and monitoring mechanisms of process and outcome for Coronary Heart Disease services and population groups.
- To have regard to the National Cardiovascular Health Strategy and made recommendations on its implementation within the South Eastern Health Board.

Membership

Dr. Orlaith O'Reilly, *Director of Public Health,* ***Chair***
Ms. Mairead Gleeson, *Secretariat/ Project Manager, Cardiovascular Health Strategy*
Mr. Peter Finnegan, *Regional Manager*
Dr. Patrick McKiernan, *Consultant Physician, Wexford General Hospital*
Dr. Michael O'Reilly, *Consultant Physician/Cardiologist, Waterford Regional Hospital*
Mr. Mark Doyle, *A & E Consultant, Waterford Regional Hospital*
Dr. Michael Conway, *Consultant Physician/ Cardiologist, St. Luke's Hospital*
Dr. Ann-Marie O'Byrne, *Specialist in Public Health Medicine*
Dr. Cormac Macnamara, *General Practitioner, Waterford*
Dr. Declan Murphy, *General Practitioner, Kilkenny*
Dr. Eddie McGrath, *Consultant Paediatrician, St. Joseph's Hospital, Clonmel*
Dr. Christine Donnelan, *Consultant Physician, St. Joseph's Hospital, Clonmel*
Ms. Anne-Marie Lanigan, *Director of Primary Care*
Ms. Audrey Lambourn, *Communications Manager*
Mr. Dermot Halpin, *General Manager, Waterford Community Care*
Ms. Siobhan Julian, *Dietitian, Wexford General Hospital*
Mr. Scott McLean, *Chest Pain Nurse, Waterford Regional Hospital*
Ms. Catherine Dwyer, *Regional Co-ordinator for Cardiac Diagnostics Services, Waterford Regional Hospital*
Ms. Bernie O'Brien, *Cardiac Rehabilitation Co-ordinator, St. Luke's Hospital*
Ms. Biddy O'Neill, *Regional Health Promotion Manager*
Ms. Liz Ryan, *Resuscitation Training Officer, St. Joseph's Hospital, Clonmel*
Ms. Margaret Hewitt, *Ward Sister, St. Joseph's Hospital, Clonmel*

Southern Health Board

Terms of Reference

- To provide updates from all sectors on the implementation of the Five Year Action Plan.
- To provide the opportunity to identify gaps and barriers in the implementation progress to reach the plans objective.

Membership

Dr. Elizabeth Keane, *Director of Public Health,* ***Chair***
Dr. Fiona Ryan, *Specialist in Public Health Medicine*
Ms. Wendy Keena, *Development Manager*
Ms. Deirdre Crowley, *Senior Executive Officer*
Mr. Pat Healy, *Programme Manager*
Mr. Pat Madden, *Programme Manager*

Dr. Peter Kearney, *Consultant Cardiologist*
Mr. Aonghus O'Donnell, *Consultant Cardiothoracic Surgeon*
Ms. Shirley O'Shea, *Senior Health Promotion Officer*
Prof. Ivan Perry, *Department of Epidemiology & Public Health*
Ms. Betty Hickey, *Nurse Service Manager*
Mr. Peter Curley, *Chief Ambulance Officer*
Ms. Anne Casey, *Irish Practice Nurses Association*
Mr. Paddy O'Brien, *Regional Manager*
Mr. Declan Hamilton, *A/Principal Environmental Health Officer*
Mr. Michael O'Mahony, *Cork Mended Hearts*
Mr. Arthur Baker, *Joint Chairman*
Mr. Luke Griffin, *FACE*
Ms. Una Brick, *Nurse Tutor*
Ms. Mary Fanning, *Director of Public Health Nursing*
Dr. Martin O'Fathaigh, *Director of Adult Education*
Ms. Sheila King, *Nutritionist*
Ms. Norma Deasy, *Communications Manager*
Mr. Michael Maguire, *Chief II Cardiac Technician*
Dr. Michael O'Grady, *Primary Care Unit*
Dr. Michael Dunne, *General Practitioner*
Mr. Gerry O'Callaghan, *Chief Executive Officer*
Mr. Dave Walsh, *Director of Development*
Ms. ValerieO'Sullivan, *Rehabilitation Co-ordinator*
Ms. Gay Castles, *Senior Physiotherapist in Cardiac Rehabilitation*
Ms. Catriona Cotter, *CNMII*
Ms. Catherine Murphy, *HealthPromotion Manager*
Ms. Evelyn Murray, *Administrator*
Ms. Nora Geary, *Business Manager*
Ms. Margie Lynch, *General Manager*
Dr. Pat Sullivan, *Consultant Physician*
Ms. Margo Topham, *Planning & Development Manager*
Mr. John A Murphy, *Chief Executive Officer*
Mr. Tony McNamara, *General Manager*

Western Health Board

Terms of Reference

- Provide support and direction for the four subgroups namely, Health Promotion, Hospital Care & Rehabilitation, Primary Care and Pre-Hospital Care and Information Systems & Equity.
- Annually review and update membership of the Regional Task Force group and the four subgroups.
- Regularly monitor the progress of projects and initiatives that have been funded by Cardiovascular Health Strategy funding within the Western Health Board region.
- Review and approve the annual submission of Cardiovascular Health Strategy funds prior to the date of submission to the Department of Health & Children.
- Provide direction and approval to the Cardiovascular Health Strategy Project Manager in the allocation of Cardiovascular Health Strategy funds awarded by the Department of Health and Children.
- In conjunction with the Western Health Board Cardiovascular Health Strategy Project Manager authorise the re-allocation of any 'saved' Cardiovascular Health Strategy funds on an annual basis.

Current Members

Dr. Declan McKeown, *Director of Public Health,* ***Chair***
Mr. Barry Kennedy, *Regional Manager, Department of Social, Community and Family Affairs*
Dr. Kieran Daly, *Consultant Cardiologist*
Ms. Louise Dobbins, *Co-ordinator*
Mr. Andrew Ferguson, *Director of Operations*
Ms. Fionnuala Ui Chatasaigh, *Senior Inspector*
Mr. Jim McGovern, *Chief Executive*
Ms. Mary Mullery, *Staff Officer*
Ms. Mary Russell, *Staff Officer*
Dr. Sean Conroy, *Regional Manager*
Mr. Neil Johnson, *Chief Executive, Croí*
Ms. Helen Murphy, *SIPTU, Galway*
Ms. Mary Mullins, *Community and Enterprise Development Officer*
Dr. Mary O'Rourke-Keenan, *Project Manager*
Dr. John Barton, *Consultant Physician*
Dr. Maura O'Shea, *Specialist in Public Health Medicine*
Ms. Cepta Smyth, *Project Office Co-ordinator*

Former Members

Mr. Dermot Power, *Regional Inspector*
Dr. Diarmuid O'Donovan, *Specialist / Lecturer*
Ms. Monica Nielsen, *School of Business Studies*
Ms. Mary O'Connor, *Journalist*
Dr. Eamonn O'Shea, *Department of Economics, NUIG*
Mr. Liam Minihan, *Director of Finance*
Mr. Brian Flynn, *Manager - Ireland West Regional Tourism*
Dr. Margaret Fitzgerald, *Chief Specialist Public Health*
Ms. Maureen Mulvihill, *Health Promotion Manager*
Ms. Valerie Coughlan, *Administrator, Ash Ireland*
Mr. Derry O'Donnell, *County Secretary, Roscommon*
Mr. John Tierney, *City Manager, Galway Corporation*
Prof. Cecilly Kelleher, *Department of Health Promotion, NUI*
Mr. John O'Mahony, *Galway Football Manager*
Ms. Ellen Mongan, *Traveller Liaison Manager*
Mr. Damien Walker, *Staff Officer*

Appendix C
Funding 2000 to 2002

Introduction

The Government decision of 7 July, 1999 authorising the publication of *Building Healthier Hearts* agreed that while no revenue measure would be formally dedicated to the Strategy, funding would be provided, in whole or in part, by increased taxation on tobacco consumption and / or a levy on tobacco companies. To the end of September 2002 the Strategy has been funded from the increased taxation on tobacco since the 1999 Budget. To September 2002, the Government has allocated a total sum of €45m towards the implementation of the Cardiovascular Health Strategy, as follows:

- €15m in 2000.
- €19m in 2001.
- €11m in 2002.

In addition €4.2m has been allocated through the GMS Payments Board for the provision of Nicotine Replacement Therapy (NRT) to people under the General Medical Scheme (GMS).

1. Distribution of Funding to Health Authority/Boards 2000 to 2002

Health Authority/Board	2000	2001	2002	Total
	€m	€m	€m	€m
ERHA	3.81	3.81	3.00	10.62
MHB	1.27	1.60	0.55	3.42
MWHB	1.27	1.40	1.30	3.97
NEHB	1.27	2.40	1.00	4.67
NWHB	1.27	1.50	0.55	3.32
SEHB	1.27	1.60	1.30	4.17
SHB	1.27	2.80	1.50	5.57
WHB	1.27	1.27	0.90	3.44
Total	**12.70**	**16.38**	**10.10**	**39.18**

2. National Initiatives

i. 2000 funding

In 2000, €2.54m was allocated for national initiatives and was allocated as follows:

National initiative	€
National mass media campaign *Ireland needs a Change Of Heart* and some funding towards an anti-smoking campaign targeted specifically at young girls	1,269,738
Slí na Sláinte	63,486
National Heart Alliance Conference	21,586
Cardiac technician training	308,546
PHECC set-up costs	317,436
STAG	63,486
Lecturer in Royal College of Surgeons of Ireland	19,046
Order of Malta	12,697
50% cost of pharacoepidemologist at St James's	12,697
Cardiac waiting lists	126,973
Staffing and consultancy	215,855
Health Promoting Hospitals Network	63,486
Venues and associated costs for meetings	44,440
Total	**2,539,476**

ii. 2001 funding

In 2001, €2.54m was allocated for national initiatives. Funding was earmarked to commence the initial phase of the secondary prevention programme in general practice, *Heartwatch*. As discussions on this programme did not conclude it was not possible to commence the programme in 2001. Accordingly, a sum of €680,000 while not drawn down for the Cardiovascular Health Strategy in 2001, this funding returned to the base for the Cardiovascular Health Strategy from 2002. The allocation of national funding was as follows:

National initiative	**€**
National mass media campaign *Ireland needs a Change Of Heart* and	
funding towards the anti-smoking advertisement, *NICO*	889,040
CHAIR project	285,310
Eco machine for SHB	317,430
SEHB Primary care pilot project	368,220
Cardiovascular Health not drawn down	680,000
Total	**2,540,000**

iii. 2002 funding (€2.8m available)

In 2002, €2.8m was allocated to national initiatives and allocated as follows:

National initiative	**€**
Secondary Prevention Programme in GP, *Heartwatch*	2,675,000
CHAIR project	125,000
Total	**2,800,000**

iv. Analysis of GMS Claims for Nicotine Replacement Therapy April 2001 to October 2002

Year	**Number of Prescriptions for NRT**	**Total Cost €**
April 2001 to December 2001	38,329	1,283,217
January 2002 to October 2002	77,026	2,931,446

v. Additional Posts

Breakdown of additional Posts funded by the Cardiovascular Health Strategy, 2000, 2001 and 2002.

Health Sector and Profession	2000	2001	2002	Total
Health Promotion				
Smoking cessation officers	12.5	13.5	0	26
Community Dietitians	14	22	0	36
Physical Activity/Workplace	25	4	1	30
Health promotion officers	3	16	3	22
Environmental Health	5	2	0	7
Support Staff	11	7	0	18
Subtotal	**70.5**	**64.5**	**4**	**139**
Primary Care and pre Hospital				
Public health Nurses/Nurse facilitators	19	21.5	12	52.5
Community Dietitians	5	11	0	16
Ambulance Crews	5	0	3	8
Doctors	2	0	10	12
Resuscitation Training Officers	2	3	1	6
Support Staff	4	6.5	0	10.5
National Secondary Prevention programme	0	0	8	8
Subtotal	**37**	**42**	**34**	**113**
Hospitals				
Consultant Cardiology	0	0	9	9
Registrars	0	9	1.5	10.5
Nursing	39	67.5	21	127.5
Technicians	24	43.5	13.5	81
Resuscitation Training officers	9	11	1	21
Dietitians	11	1.5	1.5	14
Technical Support Staff	19	8.5	3	30.5
Secretarial/Clerical	15	15	4.5	34.5
Subtotal	**117**	**156**	**55**	**328**
Cardiac Rehabilitation				
Co-ordinators	17	21.5	6.5	45
Physiotheraphy/Occupational Therapy	7	12	2	21
Dietitians/health promotion officers	6	7	1	14
Social Workers/Psychologists/Pharmacists	0	8.5	0	8.5
Support Staff	6	14.5	0	20.5
Subtotal	**36**	**63.5**	**9.5**	**109**
Audit/Research				
Research	7	5	3.5	15.5
Project Management/Administration	22.5	20	1	43.5
Research Projects	0	10	0	10
CHAIR	0	7	0	7
Department of Health and Children	2	2	1	5
Subtotal	**31.5**	**44**	**5.5**	**81**
Total	**292**	**370**	**108**	**770**

Abbreviations

ACLS	Advanced Cardiac Life Support
ACS	Acute coronary syndrome
AED	Automated external defibrillator
AGREE	Appraisal of Guidelines for Research and Evaluation
AMI	Acute myocardial infarction
BLS	Basic life support
CARE	Community Action in Response to Emergencies
CHAIR	Coronary Heart Attack Ireland Register
CHD	Coronary heart disease
CPI	Consumer Price Index
CPR	Cardiopulmonary resuscitation
CSO	Central Statistics Office
CUH	Cork University Hospital
ECAHB	East Coast Area Health Board
ECG	Electrocardiogram
EPS	Electrophysiology
ERHA	Eastern Regional Health Authority
FSPB	Food Safety Promotion Board
GMS	General Medical Services
GP	General Practitioner
HeBE	Health Boards Executive
HIPE	Hospital in-patient enquiry
HPH	Health Promoting Hospital
HRB	Health Research Board
IARC	Irish Association of Cardiac Rehabilitation
IBEC	Irish Business and Employers Confederation
ICTU	Irish Congress of Trade Unions
IHF	Irish Heart Foundation
MHB	Midland Health Board
MWHB	Mid Western Health Board
NAHB	Northern Area Health Board
NAPS	National Anti-Poverty Strategy
NCCA	National Council for Curriculum Assessment
NCIS	National Cardiovascular Information Systems
NEHB	North Eastern Health Board
NRT	Nicotine replacement therapy
NWHB	North Western Health Board
PACE	Personal Assistance in Choosing Exercise
PCI	Percutaneous coronary intervention
PHECC	Pre-Hospital Emergency Care Council
PHN	Public health nurse
PTCA	Percutaneous transluminal coronary angioplasty
SCC	Smoking cessation clinic
SEHB	South Eastern Health Board
SHB	Southern Health Board
SLÁN	Survey of Lifestyles, Attitudes and Nutrition
SPHE	Social and Personal Health Education
STAG	Smoking Target Action Group
SWAHB	South Western Area Health Board
WHB	Western Health Board