

Country report Ireland – February 2014



Report by **Dr Angie Brown** and **Dr Siobhan Jennings**
National CVD Prevention Coordinators for Ireland
Prepared for the EACPR "Country of the Month" initiative
Contact: [email Dr Angie Brown](mailto:angie.brown@hse.ie) | [email Dr Siobhan Jennings](mailto:siobhan.jennings@hse.ie)

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Basic information about the Republic of Ireland

Ireland is situated in the North West of Europe. It comprises the Republic and Northern Ireland which is part of the United Kingdom. Both parts of the island have separate health systems.

Population

- The population is now 4.6 million, an increase of 8% since 2006.
- The population has become very diverse. The number of people living in Ireland but born outside the state increased by 30% between 2006 and 2011. This now represents 12% of the population.
- 34% of the population is under 25 years of age and 12% of the population is over 65 years of age.
- The number of people over the age of 65 years is projected to more than double over the next 30 years with the greatest proportional increases occurring in the 85+ age group. (1)

Life Expectancy

- Life expectancy in Ireland has risen considerably over the past 10 to 15 years and is now one year above the EU average. Women are living longer than men.
- Male life expectancy at birth is now 78.3 years with female life expectancy at birth at 82.8 years. (2)
- However, life expectancy is not equal across Irish society with a 4.3 year gap recorded between the most and least affluent in society in 2006/07.

I. Structure of Health care in Ireland

Ireland has a multi-tiered health system which is undergoing reform. The Health Service Executive (HSE) provides all of Ireland's public health services (3). The health sector budget was €13.46 billion in 2011 (8.9% of GDP). Following changes as a result of the economic crisis funding for the health sector has fallen by 22% since 2008 (4). Approximately 80% of health funding is provided through the taxation system and private health insurance provides an additional source of funding (3).

Currently, Irish residents are entitled to either full (Category 1) or limited eligibility (Category 2) for health services. Forty percent of residents have medical cards (Category

1) (2) which allow access to GP services, community health services, dental services, prescription medicine costs, hospital care and a range of other benefits free of charge. This system is means tested. Others may qualify for a free GP visit card only, with other services incurring a cost. People without medical cards (category 2) can still access community and hospital health services, either free of charge or at reduced cost. A Drugs Payment Scheme is in place whereby those without a medical card pay up to €144 per month for prescribed medicines with the State guaranteeing to pay any further costs.

Health insurance is voluntary in Ireland. Private health insurance contributions attract tax relief. At the end of December 2012, 45.8% of the Irish population had private health insurance (5).

However, the Government is undertaking a major reform of the health system as set out in *'Future Health: A strategic programme for reform of the health service, 2012-2015'* (6). In addressing one of the pillars of reform Healthy Ireland (HI) (7), a new national framework for action to improve the health and wellbeing, was launched (see under Prevention Methods).

As well as these reforms, the improvement in the quality of care provided to service-users is a priority. Within this context a National Committee for Clinical Effectiveness (NCEC) has been formed to establish national guidelines. The next iteration of the European Guidelines on CVD Prevention in Clinical Practice in 2016 will be submitted to the NCEC for endorsement by the Minister for Health.

Another feature of the current health reform programme is a single-tier health service, supported by Universal Health Insurance (UHI) that is designed in accordance with the principles of social solidarity (6). As part of the Government's phased approach to the introduction of UHI and a significant step as part of the reform of the health services, the Minister for Health announced, under budget 2014, the intention to provide for free GP care for children up to and including 5 years of age (8).

Within the health service there are 48 acute publicly funded hospitals with 28 having facilities for acute cardiac care, 9 of which are major cardiac centres with catheterisation suites (7 centres are designated 24/7 primary percutaneous coronary intervention [PPCI] centres). A further 7 private hospitals have cardiology services with interventional capabilities. There are circa 2,500 GPs in Ireland with an emphasis in recent years on developing larger practices in primary care. In 2012 there were 2.1 cardiologists and 44.3 GPs per 100, 000 inhabitants (9).

Since 2010, within the publicly funded sector, key clinical areas have been targeted for improvement through formal clinical programmes, led by a senior clinician appointed jointly by the HSE and the Royal College of Physicians of Ireland. The focus of these clinical programmes is to standardise care of patients. The following programmes address improvement in cardiovascular disease and allied areas: Stroke, Acute Coronary Syndrome, Heart Failure, Diabetes and recently a broader programme addresses Prevention of Chronic Diseases (10).

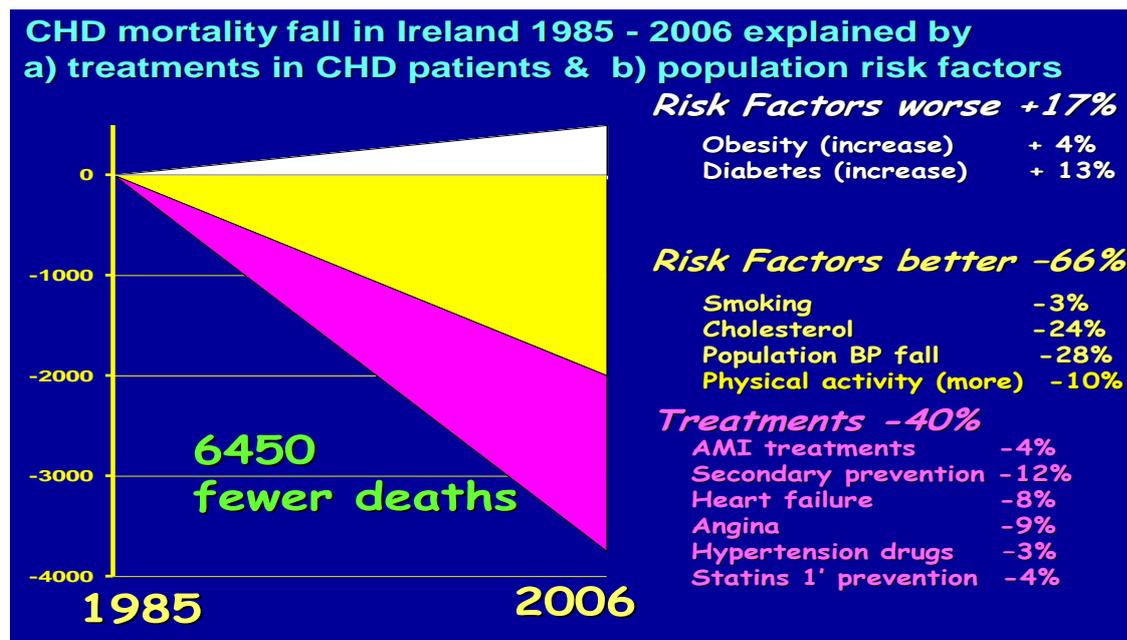
II. Risk factor statistics

Health status

Mortality: The past three decades have seen a rapid reduction in the number of deaths from cardiovascular disease in Ireland due to improvements in treatment uptake and changes in levels of the main risk factors. Coronary Heart Disease (CHD) mortality rates fell by 68% in men and by 69% in women between 1985-2006. This resulted in approximately 6,450 fewer CHD deaths than if mortality rates had not changed (11). Overall, approximately 40% (38% in men; 45% in women) of the CHD mortality decline could be attributed to improvements in treatment uptake and around 48% of the CHD mortality decline was attributable to risk factor improvements. However negative trends in diabetes and obesity levels generated an estimated 17% additional CHD deaths and are of significant concern (figure 2.1).

This reduction in CVD mortality in the Irish population has resulted in the re-classification of Ireland as a low risk country in the European Society of Cardiology's risk estimation system [HeartScore®](#).

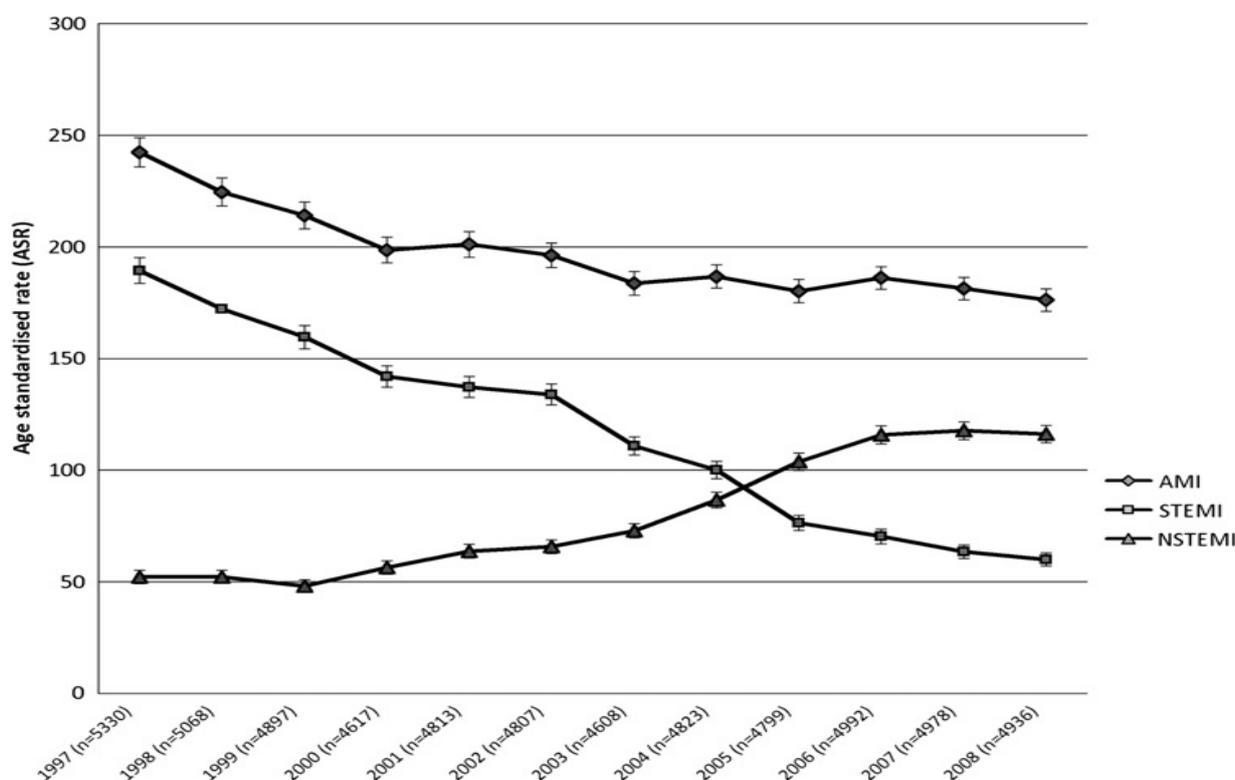
Figure 2.1



Source: Kabir Z, et al, Modelling Coronary Heart Disease Mortality declines in the Republic of Ireland, 1985-2006, Int J Cardiol (2013), <http://dx.doi.org/10.1016/j.ijcard.2013.03.007>

Hospitalisations: From 1997 to 2008 Ireland experienced a steady decrease in hospitalisation rates for AMI and a shift away from STEMI towards rising rates of NSTEMI patients who are increasingly older (12).

Figure 2.2 Age-standardised rates (95% CI) for AMI, STEMI and NSTEMI, 1997-2008.



Source: Jennings SM, Bennett K, Lonergan M, Shelley E. Trends in hospitalisation for acute myocardial infarction in Ireland, 1997- 2008. *Heart* 2012; 98: 17 1285-1289, doi: 10.1136/heartjnl-2012-301822

Main CVD risk factors

Smoking: Smoking prevalence has fallen in Ireland with the most recent data showing a rate of 22% in 2012. However Ireland lags behind comparison countries. While men smoke most, rates in young women in lower social classes are a concern. In children and adolescents (aged 10 – 17 years) there has been a reduction in the prevalence of current smoking in both boys and girls, from 21% in 1998 to 12% in 2010. There has also been a decline in reports of 'ever smoking' from 41% in 2002 to 27% in 2010 (13).

Raised cholesterol: 75% of people in the TILDA study (14) of subjects 50 years and over and 82% of people in SLÁN 07 (aged 45 years and older) (15) had a total cholesterol of >5mm/l with women less likely to have normal cholesterol. Most (62%) were undiagnosed. More middle aged people (aged 45- 64 years) had high cholesterol levels (69%) and were not receiving treatment, compared to those aged 65 years and over (49%).

Consequently, it is estimated that approximately 340,000 people have been diagnosed with raised cholesterol with a further 980,000 people undetected and in need of assessment of risk and possible treatment.

Raised blood pressure: In Ireland between 49% (TILDA) (14) and 60% (SLÁN 07) (15) of people had raised blood pressure or were on treatment with higher rates found in males and in those of increasing age.

Mean systolic BP has decreased in women since the 1980s but not in men. Only a quarter (27%) of people detected and treated were optimally managed (15). It is estimated that around 950,000 middle aged and older adults have raised blood pressure and this is expected to rise to 1.22 million by 2020 (16).

Overweight and Obesity: At least 6 out of 10 Irish adults (61-64%) are either overweight or obese and this is a growing problem. In one series of studies, tracking BMI from 1990 – 2011, obesity rates in males rose from 8% to 26% and in females from 13% to 21%. Overweight levels reduced in the same time frame for males (from 51% to 44%) and rose slightly in females (28% to 31%). Furthermore over half of Irish adults have central obesity (17).

One quarter of Irish children are either overweight or obese with girls more obese and more overweight than boys. Ireland is middle ranking internationally between the Netherlands (12%) and Italy (36%) for childhood overweight and obesity.

Considerable attention is needed to reach the target of restoring BMI to 1999 levels by 2019 in Ireland in both adults and children.

Physical activity: Almost one in three Irish adults do not achieve a baseline level of recommended activity, however, recent studies of sports participation suggest that physical activity overall may be on the increase and notably sedentarism on the decrease. The overall pattern of higher levels of physical activity in younger men, reducing with increasing age, contrasts with the relatively low level of physical activity in women across all age groups.

In children, 60% of boys report exercising four or more times a week compared to 40% of girls which falls short of the 60 minutes a day recommendation (17).

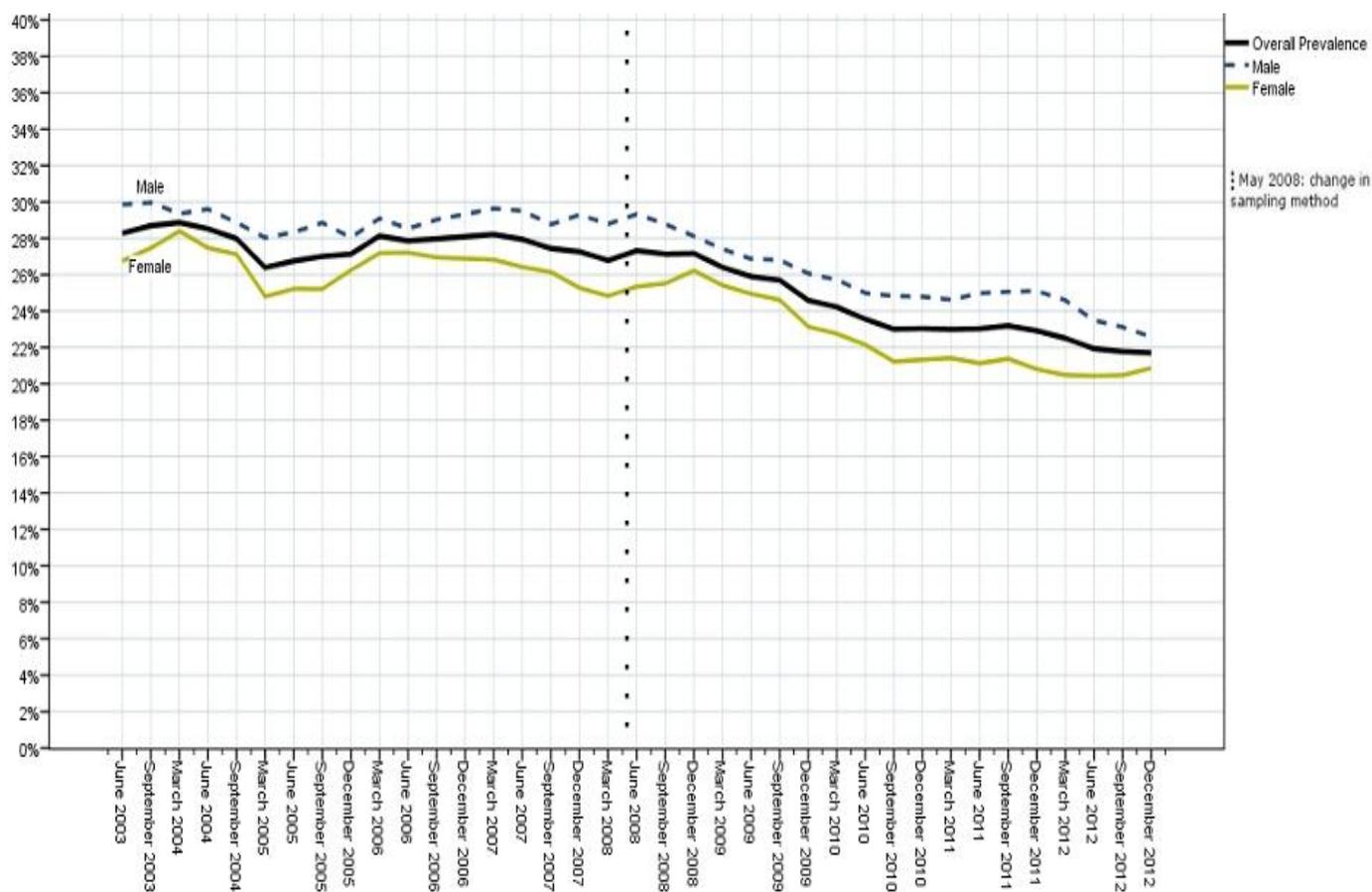
Diabetes: The estimated prevalence in adults of type 2 diabetes in Ireland is circa 3.5% with studies in older populations (aged 45+) estimating prevalence of circa 9%. However one recent international study estimated Irish prevalence rates for the adult population to be 5.5%. The National Diabetes Programme uses the figure of 190,000 people with diabetes expected in Ireland by 2015 as the planning number (17).

Alcohol: Alcohol is a significant contributor to stroke and so to cardiovascular disease overall. Alcohol consumption in Ireland is a major concern. In 2010 the average alcohol consumption in the adult population in Ireland was 11.9 litres (pure alcohol per person per year). Notably 19% of the adult population in Ireland are abstainers, making the actual amount of alcohol consumed per drinker considerably more. Consumption in children is also a worry with a survey of schoolchildren in 2006 reporting that by 16 years of age; one in five teenagers were weekly drinkers and over half reporting having ever been drunk. The pattern of alcohol purchasing in Ireland has shifted from the pub to the off-licence sector, and to supermarkets in particular (18).

Atrial fibrillation: Atrial fibrillation (AF) is a growing public health problem in Ireland due to the ageing of the population and survival following other cardiovascular events. It is associated with an increase in mortality as it causes a five-fold rise in stroke and as it frequently coexists with heart failure. A recent estimate in Ireland reported the prevalence of AF as 3.2% of the total population aged over 50 years, 5.3% in the over 65s and almost 11% in those aged over 80 years old. This is greater than that experienced by our European neighbours. 30% of the annual stroke deaths (2000 approx.) are attributable to AF. Between 20 – 30% of newly presenting strokes have AF - almost half of whom were undetected. A further one in five had AF detected but were untreated (19).

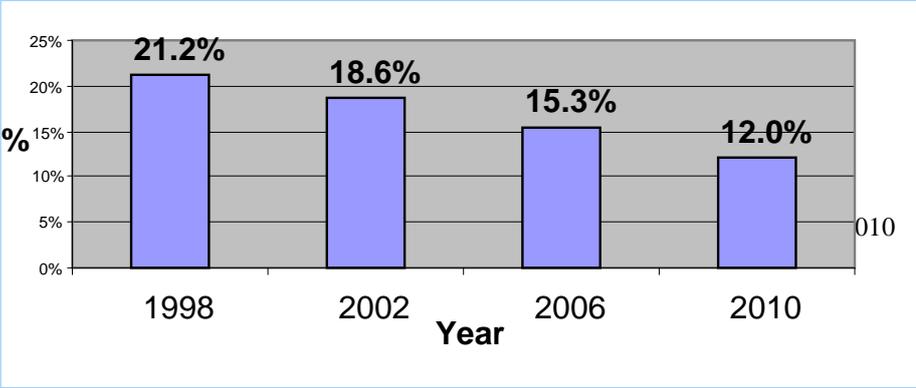
Inequalities: Overall, low-income people are more likely to smoke, be overweight or obese as adults and children and take less exercise as adults. Also hypertension shows a social class differential with the poorer sections having higher levels of raised BP though no differential is shown for raised cholesterol. Notably, smoking is the greatest contributor to health inequalities between the richest and poorest sections of society. It is also a significant factor in gender based mortality differences (17).

Figure 2.3 Trend in the Prevalence of Smokers to the End of December 2012 by Gender 12 Month Moving Average



Source: National Tobacco Control Office. www.ntco.ie

Figure 2.4 Trends in smoking in school-aged children



Source: Health Behaviour in School-Aged Children (HBSC), 1998 – 2010

III. Main actors and Prevention methods

IIIa. Main actors

Government and Ministries: The Government with the Minister and the Department of Health (DOH) formulates and evaluates policies for health and the strategic planning of health services. An important new Department of Children and Youth Affairs has been created which works closely with the DOH. Intergovernmental and intersectoral action is also key as recognized by the recent "Healthy Ireland" framework (7).

Health service provision: The Health Service Executive provides all of Ireland's public health services, in hospitals and communities across the country. Of the 48 acute publicly funded hospitals, 28 have facilities for acute cardiac care and 9 are major cardiac centres with catheterisation suites. 7 centres are designated 24/7 primary PCI centres. A further 7 private hospitals have cardiology services with interventional capabilities. There are circa 2,500 GPs and 1700 practice nurses in Ireland with an emphasis in recent years on developing larger practices in primary care. Community and home based care is provided by public health nurses (2361 registered in 2013). There are over 1700 community pharmacies in Ireland. In 2012 there were 2.1 cardiologists and 44.3 GPs per 100, 000 inhabitants (9, 20).

Non governmental sector: There is a strong non-governmental organisation (NGO) sector focused on CVD prevention. The Irish Heart Foundation (IHF), the national Heart and Stroke charity, has health promotion programmes in the workplace, encouraging employers to provide healthier work environments and employees to make lifestyle changes and participate in physical activity; in the community, including development of walking routes totalling over 1,000km throughout Ireland and training walking leaders; and in schools, promoting health related fitness as part of the curriculum in primary school. The IHF has led on strong Government lobbying on a tobacco free society including the workplace smokefree legislation; increased taxation on tobacco and plain packaging; restrictions of marketing of foods high in fat, sugar and salt to children and a tax on sugar sweetened drinks. www.irishheart.ie

Croí, the Cardiac Foundation in the West of Ireland, has a number of initiatives to improve the quality of life for all through the prevention and control of heart disease, stroke, diabetes and obesity. As part of Croí's work a multidisciplinary specialist health-care team delivers a wide range of community health initiatives; engaging with over 600 individuals per week in an aim to reduce premature death and disability and build healthier communities for all. www.croi.ie

Professional organisations: A number of professional organisations have endorsed the European Guidelines on CVD Prevention in Clinical Practice version 2012 (32) and many have established training sessions:

- the [Irish Cardiac Society](#)
- the [Irish Nurses Cardiovascular Association](#)
- the [Irish College of General Practitioners](#)
- the [Irish Association for Cardiac Rehabilitation](#)

- the [Irish Practice Nurses Association](#)
- the [Institute of Community Health Nursing](#)
- the [Irish Pharmacy Union](#)
- the [Pharmaceutical Society of Ireland](#)
- [Diabetes Ireland](#) (an NGO)

Insurance companies: There are 4 private health insurance companies operating in Ireland offering benefits packages covering a percentage of outpatients expenses such as GP, outpatient consultant and diagnostic tests, as well as in-hospital accommodation and consultant services (21).

Guidelines: The National Coordinators for CVD Prevention and the Irish Heart Foundation Council for CVD Prevention in Clinical Practice have achieved endorsement of the European Guidelines on CVD Prevention in Clinical Practice version 2012 (32) by the professional organisations named above as part of the national implementation strategy of the guidelines in clinical practice. The CVD Prevention Council has organised a number of CVD stakeholder meetings to consider the guidelines in the Irish context; conducted a survey in 2011 to assess the awareness and use of the guidelines and SCORE by Irish GPs and organised the “Ireland Day” scientific programme for EuroPrevent Dublin 2012. Finally, the next iteration of the European Guidelines on CVD Prevention in Clinical Practice in 2016 will be submitted to the National Clinical Effectiveness Committee for review and endorsement by the Minister of Health.

IIIb. Prevention methods

a. Healthy Ireland, launched in 2013, sets out a wide framework of actions that will be undertaken by Government Departments, public sector organisations, businesses, communities and individuals to improve health and wellbeing and reduce the risks posed to future generations. The Taoiseach (Prime Minister) himself chairs the overseeing Cabinet Committee on Social Policy and the first ambitious interdepartmental proposal is a physical activity plan for Ireland.

http://www.dohc.ie/publications/Healthy_Ireland_Framework.html

b. Strategic initiatives specifically addressing CVD started in 1999 with a major focus on prevention and treatment of CVD (Building Healthier Hearts), (22) followed by a second strategy (Changing Cardiovascular Health 2010 – 2019) (23) dealing with the burden of the modern day mix of risk factors such as ongoing tobacco consumption and rising obesity and diabetes levels as well as the challenges of an ageing population notably stroke and heart failure.

c. Key policy initiatives addressing risk factors for CVD include:

- i) A Tobacco Free Ireland by 2025** which was launched in October 2013 and promotes over 60 recommendations to de-normalise smoking in Irish society. The document also sets out measures to:
- a) Protect children from the harms of tobacco
 - b) Enforce, regulate and legislate for tobacco activities and products
 - c) Educate citizens about the dangers of tobacco
 - d) Assist those who smoke to stop

<http://www.dohc.ie/publications/TobaccoFreeIreland.html>

ii) **Public Health (Alcohol) Bill** **Public Health (Alcohol) Bill** also announced in October, 2013 an extensive package of measures for the first time to deal with alcohol misuse as a public health issue. The key measures in the Bill provide for: a) Minimum unit pricing for retailing of alcohol products, b) regulation of marketing and advertising of alcohol, specifically, c) Enforcement powers will be given to Environmental Health Officers in relation to, d) Structural Separation e) Regulation of sports sponsorship, f) Health labeling of alcohol products. <http://www.dohc.ie/press/releases/2013/20131024.html>

iii) **Physical Activity.** The **National Guidelines on Physical Activity for Ireland** were published in 2009. The guidelines establish a national consensus, based on international expert opinion and evidence, on appropriate levels of health enhancing physical activity for the Irish population. The www.getirelandactive.ie site was initially developed to promote the National Physical Activity guidelines. The site has been further developed to become a one-stop shop for physical activity information. The aim of the revised website is to encourage people to become more physically active by creating awareness of the opportunities for physical activity at local, regional and national levels. It also contains lots of information on physical activity: the benefits, how to get started, tips to stay motivated etc.

In addition a working group co-chaired by the Department of Health and the Department of Transport and Sport has been established under the Healthy Ireland programme (7). This group is developing a national physical activity plan which will focus attention on operational issues to encourage greater participation in and greater recognition of the importance of physical activity.

iv) **Overweight and obesity** has been made a public health priority with the establishment of a **Special Action Group on Obesity** (SAGO) comprising key stakeholders. The purpose is to seek to promote a healthy lifestyle, to encourage people to make healthier food choices, to become more active and take the first steps towards reducing obesity.

v) **Salt reduction initiatives**, under the guidance of the Food Safety of Ireland, have resulted in 1.1 grams of salt removed from the Irish diet. The Food industry has pledged to continue to reduce salt in processed food.

d. Addressing key determinants with early interventions by health service (HSE)

Health and wellbeing are not equally distributed across Irish society and reducing health inequalities is the focus of Goal 2 of Healthy Ireland (7) addressing the wider social determinants of health – the circumstances in which people are born, grow, live, work and age – to create economic, social, cultural and physical environments that foster health living. Examples of initiatives at community level are: the Community mothers programme, the Smart Start programme, health promoting schools and breast feeding promotion. See: www.hse.ie

IIIc. Research and surveillance in prevention

Health Research: The Minister for Health research and the Minister for Enterprise, Trade & Employment established the [Health Research Group](#) (HRG) to ensure a focus on [health research in Ireland](#).

Health Research Board: The [Health Research Board](#) (HRB) is the lead agency in Ireland supporting and funding health research.

Other important studies and agencies are:

- The [Institute of Public Health in Ireland](#) (IPH)
- The [Health Well](#)
- Nutrition research: One report outlines recent and current activities contributing to nutrition surveillance on the island of Ireland (30) Economic research '[Economic cost of overweight and obesity on the island of Ireland](#)'
- Irish Heart Foundation (IHF) funds research in the area of cardiovascular disease each year. Visit the [website of the IHF](#) for more information.
- The [Croí Heart and Stroke Centre Galway](#)
- Professional organisations (see main actors section)

Audit: Ireland participated in the EuroAspire III and IV audits of risk factor control in secondary prevention. SURF (SURvey of Risk Factors) is a much simpler but complementary international audit that was developed in and is administered from Ireland; Phase 1 has assembled data on 10,000 subjects internationally with over 1,000 coming from Ireland. As with EuroAspire, it underlines the need for more intensive efforts to optimise risk factor control, especially regarding overweight.

IV. Main Prevention activities

1. Activities of non governmental organisations

a. **The National Coordinators for CVD prevention** in conjunction with the **IHF CVD Prevention Council** are developing a national implementation strategy for the European guidelines on CVD Prevention in Clinical practice. The Council promotes the guidelines through ongoing engagement with stakeholders, organisation of conferences and provision of educational materials. At present two videos are available to GPs and to educational institutions both undergraduate and postgraduate:

www.cvdpreventioninpractice.com

b. **Irish Heart Foundation**

- **Physical activity** initiatives include
 - a) **Slí na Sláinte** (*Path to Health*) with 200 measured walking routes. Each year over 100 community volunteers are trained as walking leaders
 - b) **Action for Life** a health related fitness resource for both primary and secondary teachers.
- **Workplace "Happy Heart at Work"** Happy Heart Healthy Eating Award with over 400 companies reaching 25,000 employees certified and Active@work with 12,000 employees participating in physical activity in 2013. 19 workplace sites received the new Active@work award for sustainable activity programmes.
- **Heart Health Checks** offer employees a) a full CVD risk assessment. The programme has identified that 60% of Irish employees have at least one risk factor for CVD and there is about 30% referral rates to family doctor or b) shorter BP check or c) weight measurement check.
- The Foundation provides a **National Heart and Stroke Helpline Local 1890 432 787** and leads out on a national stroke awareness, prevention, improved services and rehabilitation programme (<http://www.stroke.ie>).

c. **Croí**

The Croí Heart and Stroke Centre Galway is home to the Croí MyAction programme - a specialist vascular health programme targeting high-risk individuals and providing them with intensive risk factor management and lifestyle modification. Running since 2009, this flagship community-based programme continues to be the only one of its kind in Ireland and has now reached over 1200 families. The programme continues to achieve outstanding and measurable improvements in cardiovascular health (24).

d. **ASH Ireland (Action on Smoking and Health)**

Smoke Free Playgrounds: ASH Ireland was established in 1992 as a joint initiative of the Irish Heart Foundation and the Irish Cancer Society. Both bodies recognised the need to have a proactive strategy in the fight against tobacco use in Ireland. ASH wrote to all county councils and city councils in 2012 to encourage participation in a smoke free playgrounds campaign. ASH recently reported that 75% of county councils and 60% of city councils have decided to introduce smoke-free playgrounds.

2. Projects and intersectoral prevention

- e. [SmarterTravel](#) is the transport policy for Ireland that sets out how the vision of a sustainable travel and transport system can be achieved. The Smarter Travel programme provides funding to improve information and facilities for cyclists, walkers and public transport users to make it easier for us to make the right choices.
- f. [The Irish Sports Council](#) plans, leads and co-ordinates the sustainable development of competitive and recreational sport in Ireland. One significant initiative of the ISC was the development of **local sports partnerships** (LSPs)
- g. [Get Ireland Walking](#) was established by the HSE and Irish Sports Council to maximise the number of people participating in walking; for health, wellbeing and fitness, throughout Ireland. The Irish Heart Foundation is a partner and provides a range of training supports to encourage volunteers in setting up and leading walks.
- h. **All Ireland Healthy Cities** Across the island of Ireland there are five WHO recognised Healthy Cities; and other cities which work to promote a healthy cities agenda such as Limerick and Dublin. The concept of an All Ireland Network of Healthy Cities is being explored in order to support work to put health high on the social, economic and political agenda of city governments.
 - [Belfast Healthy Cities](#)
 - [Derry](#)
 - [Galway](#)
 - [Waterford](#)

3. Prevention within the Health Sector (HSE)

- **Primary prevention**

The HSE promotes prevention in a number of ways. This section provides a brief overview of the approach to prevention. By working with partner organisations the HSE contributes to addressing the determinants of health as well as achieving health goals which lie beyond the remit of the Health Service. The life course is the focus of attention through a range of programmes from breast feeding promotion to cardiac rehabilitation. With a strong emphasis on tobacco control the HSE has achieved a tobacco free status on ALL hospital campuses in 2013. Campaigns concentrate on key areas for improvement such as childhood obesity reduction described later. Facilitating much of this work is a health promotion service and a public health medical service at national and local level which supports many of the initiatives mentioned in this section such as developing the smoking cessation advisor service along with developing and supporting other projects and campaigns. Also a recent development is a specific programme devoted to the prevention of chronic diseases with the aim of *'Making every contact count'*.

- **Detection and treatment of those at high risk of CVD**

Following the endorsement of the European Guidelines on CVD Prevention in Clinical Practice version 2012 (32) by statutory agencies and the major professional societies, the Irish College of General Practitioners developed a [quick reference guide](#). With the

exception of the “Heartwatch” pilot programme described below, the detection and treatment of patients at risk of CVD is not structured in Ireland at present. Contractual mechanisms to achieve standardised preventive primary care are awaited and may come about under wider initiatives such as proposed universal health insurance. Nonetheless a recent survey of Irish GPs found that 88% were aware of CVD guidelines and 54% frequently used these guidelines. For risk assessment tools awareness was high (93%) among GPs though only one third used them (25).

Examples of CVD prevention initiatives in Ireland include:

- a) The “**Heartwatch**” pilot programme in general practice, a structured programme of secondary prevention in 20% of practices in Ireland, which proved to be successful in improvement of risk factors (smoking 26%, cholesterol 53% and blood pressure 21%) (26)
- b) **Brief interventions for smoking cessation** with a commitment that 1350 frontline healthcare staff will receive training and 9,000 smokers can receive intensive cessation support from a cessation counsellor. Also 100% of hospital campuses became tobacco free in 2013.
- c) Risk assessment by **community pharmacists** following training by the IPU and IHF (27)
- d) **Education of patients** through the HSE’s Health A-Z an online database of over 600 health conditions and treatments that will support everyone living in Ireland to be well informed about their health. www.hse.ie

- **Care of people post CVD event**

Currently, the prescription of evidenced medications, smoking cessation counselling and referral to cardiac rehabilitation post ST elevation myocardial infarction in publicly funded hospitals is high (80-90%) (28). However there is no information on patients discharged after other cardiovascular events or from the private hospital sector.

4. Campaigns

1. Smoking cessation

a) In 2011 and 2013, the HSE launched integrated smoking cessation campaigns (TV, radio, print, online and social media) – “QUIT” campaign includes:

- An [interactive web based site](#) and [facebook page](#) to support people considering quitting tobacco
- A National Smokers Quitline 1850 201 203: telephone support service, in conjunction with Irish Cancer Society.
- Access to local smoking cessation advisors providing one-to-one and group therapy and support.

b) The Irish Cancer Society sponsors the [X-HALE Youth Awards](#) which have been designed to generate, youth centred, smoke-free initiatives, for young people, in a way that is both sensitive and relevant to their community’s needs.

2. Obesity campaigns

Safefood is an all-island body with a remit to promote awareness and knowledge of food safety and nutrition issues on the island of Ireland and works with partners across the island. Campaigns include:

- [Let's Take on Childhood Obesity](#) - a three year programme starting in 2013 targeting six healthy habits that parents and children can adopt, as well as an earlier [Little steps campaign](#)
- "[Stop the Spread](#)", [Weigh2Live](#) and [Operation Transformation](#) targeting adult obesity

3. Annual awareness campaigns by the [Irish Heart Foundation](#) include:

- It's a Red Alert; a campaign targeting women about CVD
- Men and Heart Attack; a multi-media campaign raising awareness of heart attack symptoms
- Blood Pressure Campaign – Know your Numbers
- Fats of Life; an educational campaign about fats and cholesterol

V. Cardiac rehabilitation and secondary prevention

Cardiac rehabilitation (CR) has a long tradition in Ireland. Rehabilitation programmes were developed in the late 1970s initially by Prof John Horgan and by Prof Risteard Mulcahy and Prof Ian Graham in the 1980s in St Vincent's and the Adelaide and Meath Hospitals, Dublin. More recently, the "My Action" programme by Croi in Galway (24) has been outstandingly successful and has focussed particularly on patients at high risk.

Professional qualifications in cardiac rehabilitation (CR) were set up initially as a diploma course in 1992 which later developed into a Masters Degree programme in the 2000s in the Royal College of Surgeons in Ireland. The current MSc in Trinity College Dublin was developed in the mid-2000s.

Cardiac rehabilitation services in Ireland are provided in general hospitals (n=37), mostly in cardiology departments with funding from the HSE. Private hospitals do not offer CR and private health insurance does not cover CR.

All rehabilitation is out-patient based and is provided by a multi-disciplinary team comprising, ideally, a physician, a nurse specialist, physiotherapist, dietician, social worker and in some cases a clinical psychologist. Structured advice on exercise with graduated circuit training, behavioural change, lifestyle and risk factor management is provided, backed up by videos and reading materials that are tested for appropriateness to the literacy of participants. Family participation is strongly encouraged.

The conventional three phases of cardiac rehabilitation are provided over 8 to 12 weeks. Attendance rates are generally high and the programmes are regarded as being supportive and are popular. Development of phase IV programmes is more variable although some programmes have developed strong community links (29).

In the first national cardiovascular health strategy in 1999 (22) CR was targeted for investment, with subsequent increase in publicly funded hospitals with CR services from 29% in 1998 to 95% in 2005, with a three-fold increase in staff and six-fold increase in patients receiving cardiac rehabilitation (23). In recent years, due to recession in Ireland, there has been a loss of momentum in relation to programme development in CR. A recent survey of publicly funded hospitals, by the [IACR](#) and IHF, found that staff cutbacks are putting the system under pressure. Nonetheless more patients (n= 4500) attended CR programmes in 2012 compared with 2010 (n= 4000) (further information available from Bridget Caffrey Armstrong ([email](#))).

VI. The Future

Challenges in Ireland in reducing the burden of CVD

- Population: An ageing and increasing population which is surviving CVD.
- Economy: As a result of a major recession there is very significant reduction in funding for the public health system. This is coupled with fewer opting to purchase private insurance. The recession has also resulted in widening the gap between the rich and poor.
- Primary care: The primary care system, while undergoing change, is still largely based on a reactive approach to healthcare with lack of reimbursement in primary care for prevention.
- Inequalities: There is a three fold differential in cardiovascular health indices across socio-economic groups in Ireland and like many western countries is likely to be widening as a result of recession and austerity.
- The National Survey of Cardiac Rehabilitation Services 2013 conducted by the IACR and the IHF identified staff cutbacks and waiting lists as the biggest difficulties facing rehab coordinators in their services.

Plans

I: The National Coordinators in association with the **IHF CVD Prevention Council** plan to promote the recently developed www.cvdpreventioninpractice.com website along with useful educational materials to achieve maximum exposure of the European Guidelines on CVD Prevention in Clinical Practice version 2012 among GPs and allied health professionals. Furthermore, we plan to use this website within medical and allied health professional undergraduate and post graduate education.

II: The implementation of the **Healthy Ireland** framework through an inter-sectoral approach (7) will be supported with contribution to the initiatives aimed at "*Tobacco Free Ireland*" (31), physical inactivity and obesity reduction programmes in liaison with policy-makers, inter-sectoral players and other stakeholders in order to achieve the targets set out.

III: Standardised packaging. It is Government policy to be tobacco free by 2025 "*Tobacco Free Ireland*" (31). Standardised packaging of tobacco products is one of a suite of legislative tools to achieve this goal. Ireland is set to become the first country in EU and only second in the world behind Australia to introduce standardised packaging of tobacco products. In November 2013, the Government approved the heads of the Public Health (Standardised Packaging of Tobacco) Bill 2013, with the legislation due to be introduced sometime in 2014.

IV: A continued focus on **obesity** is being supported by campaigns such as the *Safefood* childhood obesity, *Get Ireland Active* and *Get Ireland Walking* campaigns. There is work underway to address obesity during pregnancy and early years. The Department of Health is also working with the Food Safety Authority of Ireland on the development of a calorie calculator for small business owners to calculate calories on their menus on a voluntary basis.

V: The **Prevention of Chronic Disease Programme** in HSE aims to "make every contact count" so that there is a focus on prevention by every healthcare professional

treating a patient, resulting in shared responsibility for recording, assessing and managing key risk factors such as smoking, hypertension and overweight. This clinical programme was set up in the HSE in May 2012 to focus on strategies to prevent the development and progression of chronic diseases, including CVD in the well population, those with established risk factors and those with established diseases. The PCDP will place a particular emphasis on reducing health inequalities and re-orientating services to create a better balance between treatment and prevention. Please contact Dr Siobhan Jennings for more information ([email](#)).

VI: The **Royal College of Physicians of Ireland** has undertaken to host public meetings and convene a number of policy groups in order to address medical leadership in the area of improving risk factors and health in Ireland. Most notably policy groups on obesity and alcohol have been formed, comprising representatives from various specialities, to give firm guidance to policy makers and individuals ([Royal College of Physicians of Ireland convenes policy group on obesity](#)).

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References:

1. www.cso.ie
2. http://www.dohc.ie/publications/key_trends_2013.html
3. www.HSE.ie
4. Health Service Executive National Operational Plan 2013
5. Private Health Insurance in Ireland, Department of Health, 2013. www.dohc.ie/issues/private_health_insurance
6. Future Health. A strategic programme for reform of the health service, 2012 – 2015. Department of Health, Nov. 2012. www.dohc.ie/publications.
7. Healthy Ireland - A Framework for Improved Health and Wellbeing 2013-2025. Department of Health. 2013 http://www.dohc.ie/issues/healthy_ireland/
8. <http://www.dohc.ie/press/releases/2013/20131015.html>
9. Medical Workforce Intelligence Report. A Report on the annual registration retention survey. Medical Council 2012.
10. <http://www.hse.ie/eng/about/clinicalprogrammes/>
11. Kabir Z, et al, Modelling Coronary Heart Disease Mortality declines in the Republic of Ireland, 1985–2006, Int J Cardiol (2013), <http://dx.doi.org/10.1016/j.ijcard.2013.03.007>
12. Jennings SM, Bennett K, Lonergan M, Shelley E. Trends in hospitalisation for acute myocardial infarction in Ireland, 1997- 2008. Heart 2012; 98: 17, 1285-1289, doi:10.1136/heartjnl-2012-301822
13. National Tobacco Control Office www.ntco.ie
14. Irish Longitudinal Study on Ageing (TILDA) www.tcd.ie/TILDA
15. Survey of Lifestyle, Attitudes and Nutrition in Ireland (SLÁN) 2007 http://www.dohc.ie/publications/slan07_report.html
16. http://chronicconditions.thehealthwell.info/sites/all/libraries/tinymce/files/Hypertension_Briefing_18_May_2012_FINAL.pdf
17. Preventing Chronic Disease: Defining the Problem. Report from the Prevention of Chronic Disease Programme HSE. 2013.
18. National Substance Misuse Strategy, 2012. www.dohc.ie
19. Smith B et al for the Atrial Fibrillation working Group, 2012. Chronic Disease Watch: Atrial Fibrillation, Hypertension and vascular risk assessment

20. www.nursingboard.ie
21. www.hia.ie
22. http://www.dohc.ie/publications/building_healthier_hearts.html
23. Changing Cardiovascular Health, National Cardiovascular Health Policy 2010-2019. Department of Health. 2010.
24. Gibson et al., European Journal of Preventive Cardiology (2013) and Gibson et al., British Journal of Cardiology (2014)
25. A survey of Irish General Practitioners awareness of risk assessment tools and CVD prevention guidelines. Byrne, D. et al. Irish Heart Foundation, 2011.
26. Heartwatch Clinical Report. The National Heartwatch Programme. 2006.
27. http://www.irishheart.ie/iopen24/cardiovascular-risk-assessment-training-pharmacists-t-13_1117.html
28. Jennings S, Bennett K, Cavanagh B, et al. HeartBeat. Improving heart attack care. Ir Med J 2011; 104:9e12
29. Graham IM, Fallon N, Ingram S et al. Rehabilitation of the patient with coronary heart disease. Chapter 67, Hurst's "The Heart", 13th Edition. McGraw Hill 2011.
30. [http://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Publications/Research%20Reports/Final-Nutrition-Surveillance-Report-report-Oct2012-\(2\).pdf](http://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Publications/Research%20Reports/Final-Nutrition-Surveillance-Report-report-Oct2012-(2).pdf)
31. <http://www.dohc.ie/publications/TobaccoFreeIreland.html>
32. European Guidelines on cardiovascular disease prevention in clinical practice (version 2012), European Heart Journal (2012) 33, 1635–1701
<http://eurheartj.oxfordjournals.org/content/33/13/1635.full.pdf>