NATIONAL HEART FORUM
RESPONSE TO:
The HM Treasury Health Trends Team
SECURING OUR FUTURE HEALTH: TAKING A LONG-TERM VIEW

January 2002

INTRODUCTION

1. The National Heart Forum (NHF) warmly welcomes the HM Treasury's consultation on *Securing our future health: Taking a long-term view*. Such a review of the likely future demands on the health service is both novel and much needed if we are to reach and maintain a world class service.

2. In this response we set out why this is a unique opportunity for the Treasury to influence NHS demands and expectations in the medium to long-term. The vision for the NHS should be of a service which promotes prolonged health and can therefore focus on the treatment of non-preventable diseases, chronic degenerative diseases of old age and congenital disorders.

3. Coronary Heart Disease (CHD) is the UK's leading single killer - 135,000 people in the UK die of CHD each year, 20, 000 before they reach the age of 65 - while 86,000 people under 65 in the UK suffer a heart attack every year.

4. Mortality from CHD is decreasing and yet the prevalence of CHD remains static due both to improvements in survival after acute illness and improved detection of symptoms at lower thresholds[1]. Thus the burden on the NHS remains high.

5. It is estimated that the annual cost to the NHS due to CHD is £1.6 billion, of which only 1% is spent on prevention[2], and yet CHD is largely preventable through action to improve the diets and increase the physical activity levels of the population and to reduce levels of smoking. Such action will also prevent other serious diseases like stroke, diabetes and cancer.

6. If Government is really going to secure our future health in twenty years and beyond, proper sustained investment must be made to improve the lifestyles of the population and to increase productive life. This could lead to huge NHS savings in the long run in terms of time and resources.

7. We have set out responses to the questions as they appear in the Interim Report and have thus not produced a separate summary of our recommendations.

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[1] Lampe FC *et al.* (2001) Is the prevalence of coronary heart disease falling in British men?, *Heart*, **86**, pp499-505
[2] British Heart Foundation. 2000. *Coronary Heart Disease Statistics*. London: British Heart Foundation.

THE NATIONAL HEART FORUM

8. The National Heart Forum (NHF) is the UK alliance of over 40 national organisations working to reduce the risk of coronary heart disease in the UK. Member organisations represent the medical and health services, professional bodies, consumer groups and voluntary organisations. Members also include many individual experts in cardiovascular research. Government departments have observer status.

9. The purpose of the NHF is to work with and through its members to prevent disability and death from coronary heart disease in the UK. In order to achieve this, the National Heart Forum has four main objectives:

   To provide a forum for members for the exchange of information, ideas and initiatives on coronary heart disease prevention
   To identify and address areas of consensus and controversy and gaps in research and policy
   To develop policy based on evidence and on the views of member organisations
   To stimulate and promote effective action.

10. The NHF embraces professional, scientific and policy opinion on current issues in coronary heart disease prevention. It co-ordinates action to reduce heart disease risk through information, education, research, policy development and advocacy.

11. The NHF is a unique resource that can be utilised to assist the Health Trends Team with the modelling of disease patterns and risk factor changes.

RESPONSE TO CONSULTATION QUESTIONS

Q7.1: The review is based on the assumption that the core principles for the health service set out in the NHS Plan will remain valid over the next 20 years. Are there any further important principles that will emerge?

12. The NHS should be positioned in the public and professional consciousness as a health and not a cure/care service. The NHF strongly urges that the ninth principle listed should be made the first principle and be more explicit thus:

    the NHS will work for the maintenance and promotion of good health, strive to prevent avoidable diseases and to reduce health inequalities, and increase the public's understanding of the determinants of good health.

13. Such a principle lays the foundations to improve the health of the nation and influence the future demands on, and expectations of, the (new) NHS and avoids a fatalistic acceptance of the preventable conditions that currently overwhelm the NHS (CHD, stroke, diabetes and cancer).

14. A recent paper estimated that 95% of the population has some risk of CHD[3] and there is a continuum of risk from childhood through to manifestation of acute disease in adulthood. Thus population-wide strategies to promote health will benefit everyone, including patients, and such strategies are outlined in Q9.5, paragraphs 62-66.

15. A further core principle of the NHS must be to engage in a more active partnership with those who influence the wider determinants of health and with the public.

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[3] Beaglehole R. 2001. Global cardiovascular disease prevention: time to get serious. *The Lancet*; 358: 661-663.

16. In particular, disease prevention can be delivered if the NHS takes a strong lead in ensuring the proper implementation, monitoring and further development of National Service Framework prevention standards in partnership with other statutory and voluntary organisations.

17. Healthy Living Centres are excellent examples of how the NHS can foster multidisciplinary healthcare and deliver disease prevention strategies. These should be built on and incorporate Local Strategic Partnerships (LSPs), where these operate. Walk-in centres and NHS Direct should also be integrated in local health partnerships.

18. Links between primary care trusts and local authorities need to be strengthened in order to ensure the integration and close co-operation between social and health services, and enhance NHS partnerships to tackle the broad social, economic and environmental determinants of CHD and inequalities. NHS resources should be directed to local authorities to ensure this collaboration, ideally working as part of the LSPs.

Q7.3: What will patients and the public expect from a high quality, comprehensive health service in 20 years' time? Is it right for the review to base its projections on:

Safer, higher quality treatment
Faster access, waiting within reason
A more integrated, joined-up system
More comfortable accommodation services, and
A more patient-centred service?

19. With regard to a more patient-centred service, We believe that wherever possible the term 'public' as well as 'patient' should be used, since the NHS is responsible for delivering services for the promotion and protection of good health as well as servicing the clinical needs of 'patients'.

20. We agree that the public will expect an increasingly more "public" orientated service and they should be involved more actively in decisions on local health service provision, regardless of whether they are under going treatment. The NHF recommends that a more integrated and joined up system should include close links with the public.

21. We wish to explore the components of the term public–centred as it should apply to future expectations of the NHS. The NHF believes that a more public-centred service has to be:

Transparent
Health promoting
Equitable (see Q7.4)

<u>Health promoting</u>

22. There is an urgent need for greater and sustained investment in population health and primary prevention interventions within and beyond the NHS. Within the NHS these activities remain marginal to the other core NHS principles and yet relatively small investments can be made which significantly improve health.

23. There must be a redistribution of health expenditure towards the promotion of good health throughout the lifecourse. Only with investment in public health in the short, medium and long-term will we see a substantially reduced demand on the health service and a reduction in social and health inequalities.

Q7.4: In 20 years' time will patients continue to expect the health service to be equitable and fair?

24. Yes, but as well as providing equitable treatments across the UK, the NHS must take account of the unequal distribution of disease and ill-health within and between communities and ensure provision of adequate resources for high-need areas.

25. The NHS has a key but largely disregarded role in tackling the determinants of the social class gradient in CHD and other diseases by actively targeting support and advice to those who most need it and who tend to respond the least to health education campaigns.

26. There has been a growing shortage of GPs and other primary care professionals in deprived areas. To see that resources are adequately focused on those in most need, the NHS must overhaul the system of deprivation payments to provide real financial incentives for health care professionals working in areas of greatest need[4].

27. Equity audits should be conducted to check that all services provided are used by the appropriate range of users and that, overall, people from different socio-economic and minority ethnic groupings have access to services which are proportionate to their needs. Barriers to consultation within general practice must be examined to ensure that no users are disadvantaged.

28. Health centres should employ or liaise with welfare benefit staff (citizens advice centres and community projects) to help improve knowledge and uptake of social benefits by low income families.

29. To support and maximise NHS action, the government must provide a mechanism for clear, sustained investment to all local communities who need it (not just those singled out through government initiatives), for the regeneration of disadvantaged areas and the reduction or removal of some of the wider (non-clinical) determinants of ill-health.

30. An equitable service must eradicate ageism. Older people are the usual focus of debate around ageism in the NHS but children and young people are also key stakeholders (one fifth of the UK population is aged 16 and under). As such they should be granted respect and dignity and be recognised as a heterogeneous group with diverse needs, not small adults who simply need smaller beds.

31. In particular, investment is needed in order to establish appropriate NHS services and accommodation for teenagers who, within the community require confidentiality and who within hospital care are currently accommodated in adult wards or in children's wards, both of which are inappropriate. Investment is also needed to ensure that health promotion messages and primary prevention initiatives are targeted towards children and young people.

[4] Heath I. The role of the NHS in tackling health inequalities. In Oliver A, Cookson R and McDaid D. (eds) 2001. *The Issues Panel for Equity in Health: Discussion Papers*. London: The Nuffield Trust.

Q8.1: Has the review identified the main trends and cost drivers associated with 'universalising the best'

Delivering the National Service Frameworks
Improving clinical governance across the NHS
Reducing waiting times
Modernising the NHS estate and improving accommodation services, and
Improving patient information, using ICT more effectively to help people to take more responsibility for their own care?

32. We believe that the drivers identified focus almost exclusively on the clinical treatment of disease and its risk factors (e.g. raised blood cholesterol and blood pressure) at the expense of the promotion of healthy lifestyles. Yet within the main body of the report it is stated:

    (Para 10.53) [...] It is likely to be significantly more cost effective to address problems such as high blood pressure or high cholesterol which increase the risk of heart disease through changes to people's diet and exercise than through ongoing drug treatments such as statins, which as noted in Chapter 8 and Box 10.2 have major cost implications for the health service. A major challenge will be for the health service to get these messages across to the public. If successful, there appears to be significant scope for cost savings on both drug prevention and the need for future treatment.[...]

33. We strongly urge you to recommend throughout your report the value and importance of improvements in public health and to add a sixth driver to your list, that of:

    Sustained investment by the NHS in the public health infrastructure and in population health and primary prevention interventions.

34. Public health interventions are of a social, behavioural and situational nature and there are few magic bullets. However, relatively cheap, low tech interventions could reap great social and economic returns and offer better utilisation of many existing resources when compared to the care and cure services. In particular, there is an urgent need for comprehensive national nutrition and physical activity strategies to be developed and implemented.

35. The review should quantify the level of current investment in public health and suggest a future investment target for the NHS, based on health economics modelling which NHF members and others would be able to assist the review team with. Otherwise this unique opportunity to engage in medium to long term planning will be missed.

Below we outline the areas that such investment should seek to address.

<u>Recognition of the role that primary care should play in health promotion</u>

36. Prior to the publication of the National Service Framework for coronary heart disease, the National Audit Office surveyed 1,200 general practitioners and found that whilst 60 percent thought that promoting healthy lifestyles was the role of the primary care team as a whole, 30 per cent thought that promoting healthy lifestyles was the role of health authorities or the Government[5].

[5] National Audit Office. 2001. *Tackling Obesity in England. Report of the Comptroller and Auditor General*. HC220. London: The Stationery Office.

37. We believe that primary care team members should have an obligation to deliver dietary, weight management and physical activity advice at every opportunity and that this role should be emphasised during their professional training. Diet and physical activity are the most significant determinants of weight, blood pressure and blood cholesterol, and therefore of diabetes, CHD and cancer. Alongside tobacco cessation, their management is fundamental to the preservation of good health.

Training and accreditation for a world class public health workforce

38. For the delivery of population health and primary prevention interventions and quality advice, there needs to be in place appropriate public health training for all frontline professionals, nurturing, teaching and supporting our citizens throughout the lifecourse. National standards for public health competencies should be developed and incorporated into core training.

39. We strongly support the government's commitment to train and accredit a wider range of professionals as public health specialists. Government should openly develop a national workforce plan, with long-term objectives, resources and targets set centrally. This will provide the necessary clarity with which to determine what a world class public health service should look like, who are the key players, the type of training required etc.

Guidance

40. Efforts to see smoking cessation advice delivered in primary care are reaping rewards and should be sustained (we support ASH's response which looks at this in detail). Guidance and training have been issued to GPs, practice nurses and pharmacists to assist smokers. Training is also now available for GPs who wish to learn how to promote active lifestyles to their patients but this must be actively sought by the GP[6]. The National Heart Forum recommends that guidance and evidence of best practice should be made freely available to primary care teams in the areas of diet, physical activity and weight management in order to encourage practitioners to volunteer advice.

Independent health promotion

41. There is a need to further invest in the centres of expertise for developing the evidence and research base for public health, namely the Health Development Agency and the National Institutes of Public Health. These organisations need the same backing from government as afforded to bodies such as NICE and should have a robust independence from vested interests.

42. The Health Trends team should commission more work on forecasting/modelling disease and health trends and how these may be modified by altering health determinants. In the long term, the quality of health policy would be greatly enhanced by investing in developing the study of health economics in relation to the health service, public health and wider socio-economic policies. This is a gap in health policy competence that requires prompt attention. The recent WHO commission on health and macro-economics[7] makes interesting reading and there should be a similar application of the work to developed economies.

[6] British Heart Foundation. 2001. Physical Activity Toolkit: A training pack for primary health care teams.

[7] WHO. 2001. *Macroeconomics and health: Investing in health for economic development*. Geneva: WHO.

Other comments on the main trends and cost drivers

43. When the government published the NSF for coronary heart disease, it was with the intention of continually revising, developing and updating the framework's twelve standards and the guidance provided with them. We would like to see government commitment to this intention, in particular the further development and strengthening of the population health and primary prevention aspects of the framework. Such development should incorporate the rapidly developing evidence base and reflect the learning and sharing of best practice garnered so far.

44. The report rightly recognises that the use of statins to reduce the blood cholesterol levels of all those at risk of CHD would be very expensive. We argue that sustained health promotion programmes, combined with delivery of advice from within the primary care team (dietician, nurse or GP for example) would currently be far more cost-effective for reducing overall risk of CHD (see ASH's analysis of tobacco cessation versus statins although this situation might change if statins drop in price in the future). Aside from the economic benefits, such action would remove a dependence on a lifetime of pills, put the person back in control of their life and confer protection against other diseases such as diabetes and cancer.

Q9.1: Are there any other key changes in the health needs of the UK population that are likely to have a significant impact on expenditure over the next 20 years? Are there data available so that their impact can be quantified?

45. The data below outline the serious situation the NHS will be facing in 20 years' time if action is not taken now to encourage healthy lifestyles across all ages through the implementation of population health and primary prevention strategies. The evidence of effectiveness of some interventions may not yet be known but we believe that the government must adopt the precautionary principle and invest in appropriate interventions based on the best available evidence to date.

Obesity

46. The report mentions obesity in passing (page 149) but does not do justice to the potential time bomb we are facing if prevalence of obesity in the UK is not checked. In 1980, 8% of women and 6% of men in England were classified as obese. Twenty years on and 21% of women and 17% of men are obese. The National Audit Office estimates that if the average rate of increase in the prevalence of obesity between 1980 and 1998 continues, almost a half of all adults will be obese by 2020[8]. Currently over half of the adult population in the UK is overweight. The UK 's obesity problem is worse, and deteriorating at a far greater rate, than in any other EU member states. Obesity is now recognised as a major disease in its own right.

47. Overweight and obesity in an individual are a result of a greater energy intake (through the diet) than energy expenditure (physical activity). Thus prevention of excessive weight gain rests entirely on the delivery of effective nutrition and physical activity messages and interventions. Obesity is commonly linked to heart disease, type 2 diabetes and high blood pressure, the latter two diseases also being risk factors for heart disease.

[8] National Audit Office. *op cit.*

Estimated increased risk for the obese of developing associated diseases[9]

Disease	Relative risk - women	Relative risk – men
Type 2 diabetes	12.7	5.2
Hypertension	4.2	2.6
Myocardial infarction	3.2	1.5
Cancer of the colon	2.7	3.0

48. It is not hard to see that a substantial increase in the prevalence of obesity could therefore have disastrous effects on the incidence of other diseases and thus on NHS spending. The National Heart Forum strongly urges the report to recommend that the Treasury takes very seriously the threat that obesity poses, and ensures that resources are ring fenced for multisectoral action to tackle obesity. In particular, we believe that there should be strong NHS investment in research to determine effective measures for the prevention of obesity and its reversal through interventions focusing on diet and physical activity.

49. Action on obesity is particularly required among lower socio-economic groups and among Black Caribbean and Pakistani women in which rates are higher than among the general population.

50. Overweight is the main risk factor for diabetes – about two thirds of cases of type 2 diabetes would be prevented if no one was overweight.

Diabetes

51. The report mentions diabetes in terms of treatment costs based on current prevalence (Chapter 8). Around 1.4 million people in the UK have been diagnosed with the disease (prevalence of about 3% in the adult population), but a further one million are thought to have the disease but not yet know it (there is an estimated lag time in diagnosis of about 9 years). The number of people with diabetes (both diagnosed and undiagnosed) is estimated to double by 2010 to about 3 million[10]. A quarter of these will already have CVD. This prediction has serious implications for the future incidence of heart disease and for CHD mortality rates (diabetic patients are two to four times more likely to die from CHD). According to Department of Health figures, 5% of total NHS resources and up to 10% of hospital in-patient resources are used for the care of people with diabetes.

52. Thirty-five percent of men and 47% women with diabetes have high blood pressure, as compared 17% men and 15% women in the general population. Diabetics are also more likely to be current or ex-smokers (52%) and 64% of diabetics have total cholesterol level greater than 5 mmol/l.

53. Diabetes is three to five times more common among people of African-Caribbean and Asian origin, although the reasons are not well understood.

Hypertension

54. Forty-one percent of men and 33% women have high blood pressure and half of these people are not on medication[11]. The occurrence of high blood pressure increases dramatically with age (70% of those over 65 have high blood pressure which is 8 million people) and this has obvious implications for an ageing population. The occurrence of high blood pressure is also greater among the less well-off in society.

[9] National Audit Office. *op cit.*

[10] http://www.diabetes.org.uk

[11] Department of Health. 2001. *On the State of the Public Health. The Annual Report of the Chief Medical Officer of the Department of Health*. London: Department of Health.

Children and young people

55. The origins of CHD lie in exposure from an early age to the risk factors of poor diet, physical inactivity and tobacco use. The NHF strongly believes that as today's children grow older there may be a reversal of the declines in CHD incidence and mortality we are currently witnessing . Compared with the previous two or three generations, today's children are consuming fattier, saltier, more sugary foods and fewer vegetables and fruit. It is suspected that their diets are also more calorie dense than national food surveys imply because of the extent to which food is now purchased and consumed outside of the home, for which there is currently no adequate measure. Today's children are also physically less active in their daily lives and are heavier, and teenage girls in particular are smoking more now than before.

56. The UK is thus facing a potential obesity, diabetes, CHD and cancer time bomb as today's and future children and young people become adults (see Q9.1) with serious consequences for the workload and resources of the NHS.

Q9.4: Will there be a compression or expansion of morbidity among future elderly people?

57. We agree with the review that there will be an overall compression of morbidity among future elderly people. However, we believe that the review should also look at trends in morbidity across all ages. As outlined in paragraph 4, the prevalence of morbidity among CHD patients remains static despite a falling mortality rate. As CHD treatments and detection rates continue to improve, we can expect to see an increase in the prevalence of CHD morbidity at least in the short-term which will apply to all ages, not just to the elderly.

Q9.5: What health promotion and disease prevention interventions over and above smoking cessation are likely to have a significant sustained impact on health service utilisation over the next 20 years? To what extent will health inequalities change? What impact will this have?

58. The main investment to date in the prevention of non-communicable diseases has been in smoking cessation, tobacco control and smoking prevention. We believe that such investment should continue.

59. However, now is the time to invest in the implementation of comprehensive national strategies to improve nutrition and increase levels of physical activity among children and adults. The immediate implementation of such strategies, focusing in particular on children and young people, could substantially reduce demands on the NHS in 20 years' time due to preventable ill-health and could mean the elimination of death and disability from CHD among people under 65, in as soon as 40-50 years' time. In the short-term, these strategies will reduce health inequalities, increase social inclusion and improve mental health.

60. Evidence of effectiveness of interventions has and is being gathered by many groups and organisations and should be used to inform these strategies. If action is not taken now, we will continue to witness a rise in the prevalence of obesity and diabetes in future generations and the time bombs outlined in Q9.1 will be realised.

61. The National Heart Forum has published several reports on action that should be taken by Government to address the wider determinants of ill-health (please see page 12 for a list of publications). In February 2002 the NHF launches its young@heart policy framework which sets out a comprehensive series of policy recommendations

addressing child health and well-being, including action to address communities, education and commercial responsibility that, if implemented, would eradicate deaths from CHD in people under 65 years of age. We will forward a copy to the review team.

Diet and nutrition

62. Diet and nutrition are key factors in the development of CHD due to their influence on blood cholesterol levels in particular, but also on blood pressure, weight and on glucose tolerance. Nutrition is believed to underlie the majority of the 135,000 deaths from coronary heart disease annually in the UK[12].

63. A diet high in (saturated) fat and salt has a causative effect, whereas a diet rich in fruit and vegetables has a protective effect on heart disease and some cancers. In order to reduce the high rates of cardiovascular disease in the UK, the Committee on Medical Aspects of Food Policy recommends a 50% increase in consumption of vegetables and carbohydrates and reductions in saturated fat and salt intake[13].

64. We recommend that a comprehensive national strategy for nutrition needs to be developed and implemented which would include action to:

Improve nutritional standards in, and extend free provision of, schools meals;
Extend number of breakfast clubs and cooking skills/clubs;
Increase availability and accessibility to adequate and affordable healthy diets through implementation of local food strategies by local authorities, primary care trusts and the voluntary sector.
Improve the diets of pregnant women and strengthen food skills for parents
Increase the rate and duration of breast-feeding

Physical Activity

65. Physical inactivity is now established as the major risk factor at population level[14] for CHD. Inactive populations have twice the risk of CHD than active populations. If each individual were to move up one exercise level (National Fitness Survey) i.e. from sedentary to light exercise e.g. walking, this could result in a 14.1% reduction among male CHD deaths and 13.6% reduction among female CHD deaths[15].

66. We recommend that a comprehensive national physical activity strategy with national targets should be developed that includes action to:

Improve town/rural, leisure and transport planning to encourage more walking and cycling;
Increase standards and time for physical activity in the school curriculum.
Encourage and promote physical activity among all ages, e.g. walking, cycling. and swimming.

Inequalities

67. A person's CHD risk is calculated by assessment of age, sex and use of tobacco alongside the clinical risk factors such as weight, blood pressure/cholesterol level and existence or otherwise of diabetes. However, socio-economic risk factors, in particular dimensions of poverty such as low income, inadequate education, unemployment, poor housing, social isolation, do not feature in the risk calculation and yet are all strongly correlated with CHD.

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[12] Ness AR and Powles JW. 1997. Fruit and vegetables and cardiovascular disease: a review. *International Journal of Epidemiology*, 26, 1-13.
[13] Sharp I. (ed) 1999. *Looking to the Future: Making coronary heart disease an epidemic of the past*. London: The Stationery Office.
[14] McPherson, K, Britten A, Causer L. 2002. (In press) *Coronary Heart Disease: Estimating the Impact of Changes in Risk Factors*. London: The Stationery Office.
[15] Sharp, I. *op cit*.

68. Non-clinical risk factors should be recorded in a non-stigmatising way in primary care to allow a much more effective targeting of treatment and support mechanisms according to real and absolute need. This will result in the reduction, not the exacerbation of health inequalities and will cost the NHS very little to implement although such action will require careful planning to gain the support of primary care teams and of the public.

Q11.1: What are the key changes in the roles of health care professionals that are likely to occur over the next two decades, in particular:

what is the scope for a significant expansion in nurse-led services
how will the use of health care assistants change
how will the roles of specialist and generalist doctors change, and
how will partnerships with other professionals, especially social care, change?

69. Effective delivery of the NHS Plan and of the primary and secondary prevention standards of the National Service Frameworks for diabetes, cancer and CHD will most certainly demand a significant expansion in nurse-led services, particularly for screening services and for the provision of advice regarding healthy lifestyles.

Q11.2: Will the current training places give the UK the number and mix of health care professionals it needs?

70. No, not in terms of number of public health professionals needed, unless investment is made in the public health training and accreditation of a wide multidisciplinary range of personnel (see response to question 8.1, paragraphs 32-42).

Q11.7: What should be the main priorities for the health service in increasing investment in information and communication technology (ICT)?

71. A main priority should be to ensure that health inequalities are not exacerbated but are reduced, through investment in ICT. Action should be taken to ensure that ICT improves access to health education and health promotion information, in particular for those groups recognised as being hard to reach such as black and minority ethnic groups and socially excluded groups. By pulling together the data and evidence collected by the Health Development Agency, Health Promotion England (and its equivalents in the rest of the UK), the Public Health Observatories and NHS Beacon sites, the NHS can maximise its coverage and its relevance to the different communities it serves. In particular, the National Electronic Library for Public Health should serve as the hub for this information and be accessible to all.

Q12.1: Are there any health trends that will affect different parts of the UK in different ways which need to be taken into account in the final report?

72. There is a strong north-south gradient in fruit and vegetable consumption, with people in Scotland, Northern Ireland and the north of England eating considerably less than in the south. However, there are no clear differences in total fat and saturated fat consumption between the countries of the UK. Cigarette smoking is more prevalent in Scotland and Northern Ireland than in England or Wales. These differences in risk factors explain much of the CHD and lung cancer mortality rate differences across the UK.

73. Each country of the UK has set targets to address these behaviour patterns, the targets being proportionate to the size of the problem. With smoking for example, the Scottish target is to reduce the rate of smoking amongst adults (all social classes) from an average of 35% in 1995 to an average of 31% by 2010. In contrast to this, the English target is to reduce adult smoking in all social classes so that the overall rate falls from 28% in 1996 to 24% or less by the year 2010. Thus the gradient between countries will remain, even though death rates within countries due to smoking will decrease.

Q12.2: How much of the variations between the countries of the UK is attributable to different levels of social deprivation?

74. In the UK, the people with the worst health tend to be from the poorer social classes, living in areas of severe and multiple deprivation, including high unemployment and overcrowding. This same group of people is more likely to die early due to a variety of factors. Among men, the dominant factor is smoking, which accounts for over half of the difference in risk of premature death between the social classes[16]. This reflects the fact that among the most deprived groups, smoking prevalence reaches over 70%.

75. Thus one could argue that much of the variation between the countries of the UK in terms of CHD mortality is due to differences in the rates of smoking and to a lesser extent the quality of the diet. In turn, these differences are likely to reflect social class and extent of social deprivation.

Q12.7: What variations in health need between the English regions need to be taken into account in the review?

76. Regions where there is a large minority ethnic population. As noted in Q9.1, these groups have particular needs with regard to both the increased prevalence of certain diseases among different ethnic groups (see Q9.1) and to accessibility and appropriateness of services and information provided.

77. There are marked differences in CHD mortality rates between the health authority areas in the north of England and those in the south. For example, the age-standardised CHD mortality rate in Lancashire is 88/100,000 deaths compared with 44/100,000 deaths in West Sussex[17]. These differences reflect the fact that rates of smoking are higher in the north than in the south, and diets are lower in fruit and vegetables.

National Heart Forum publications

Looking to the future: Making coronary heart disease an epidemic of the past (1999)
Social inequalities in coronary heart disease: Opportunities for action (1998)
At least five a day: Strategies to increase vegetable and fruit consumption (1997)
Preventing coronary heart disease: The role of antioxidants, vegetables and fruit (1997)
Preventing coronary heart disease in primary care: The way forward (1995)
Physical activity: An agenda for action (1995)
Coronary heart disease prevention: A catalogue of key resources (1995)
Coronary heart disease: Are women special? (1994)

[16] Jarvis M, Wardle J. 1999. Social patterning of individual health behaviours: the case of cigarette smoking. In: Marmot M, Wilkinson R (eds). *Social Determinants of Health*. Oxford: Oxford University Press.
[17] British Heart Foundation. 2000. *Coronary heart disease statistics*. London: British Heart Foundation.