Coversheet for submissions

This page can be used as a coversheet for returning your response to the consultation. Completed forms and accompanying documents should reach the project team at the latest by 28 June 2004. Contributions should be sent to:

By email to: choosing.health.consultation@doh.gsi.gov.uk
By post to: Choosing Health? Project Team
Department of Health
Room 528/9
Richmond House, 79 Whitehall, London
SW1A ONS
Via the website: www.dh.gov.uk/consultations/liveconsultations

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Organisation or interest¹: Academy of Medical Sciences: The independent Academy of Medical Sciences promotes advances in medical science and campaigns to ensure these are translated as quickly as possible into benefits for society. The Academy’s 800 Fellows are the United Kingdom's leading medical scientists from hospitals, academia, industry and the public service.

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Date of submission (dd/mm/yy): 28/06/04

Brief description of how the information for the submission was gathered:

-): Initially 25 Fellows, expert in public health medicine, were asked for their comments.
-): In light of these comments the Officers of the Academy initiated an Academy Working Group.
-): The Working Group prepared a draft response. During this process a number of key stakeholders were invited to comment.
-): The Working Group’s response was considered and signed off by the Academy’s Council.

¹ If responding on behalf of a larger organisation, please make it clear who that organisation represents. If responding as an individual, please mention your own interest.
Estimate of number of people engaged in providing information for the submission (e.g. numbers involved in focus groups, meetings, etc.):

~15 people were engaged in providing information for the submission in addition to the Academy’s Officers and Council.

* If you have provided an email address, we would like to store these details so that we can update you on public health initiatives. Please indicate if you are content for your details to be used in this way:

☐ Yes, I would like to receive updates on public health.
Academy of Medical Sciences response to the Department of Health’s ‘Choosing Health?’ consultation

Section 1 - Summary

1.1 The Academy of Medical Sciences welcomes this opportunity to contribute to the forthcoming White Paper on Public Health. Impressive achievements in biomedical science and medical care should not obscure the importance of the circumstances in which people live as determinants of their health. However, there is a shortage of public health research. For example, bibliographic analysis by the Health Development Agency indicates no more than 0.4% of academic and research outputs surveyed were relevant to public health interventions.

1.2 To achieve the ‘fully engaged’ scenario envisaged in the Wanless reports public health research needs strengthening. As the largest single healthcare system in the world the NHS is an unparalleled potential source of data that could fuel essential research that will benefit the public’s health.

1.3 Therefore, the Academy recommends:

- **Strengthened public health surveillance**: to allow identification of changes in key health indicators and better resourced evaluation of interventions.
- **Streamlining current research regulation**: to foster essential and timely public health surveillance, research and practice. This will reduce the many barriers and delays that are currently being experienced.
- **Strengthening the academic base of public health**: by establishing new cohorts of academics specialising in public health, providing coordinated long-term investment in the academic infrastructure of public health science at all levels and training public health service providers and policy makers in research skills.
- **Recognition that the aims of public health research are often longer term than those of clinical medicine**: public health research must be valued on a par with research that results in more immediate and visible outputs.
- **Public health should be promoted through appropriate government polices as well as encouraging informed individual choice**: government should implement evidence-based policies for public health through a number of sectors. It should develop a research agenda to evaluate the impact of intersectoral policies and interventions, for example to reduce health inequalities.

1.4 To achieve this goal a national strategy for public health is required which gives a prominent place to research, together with support for research networks to facilitate multi-centre studies. In responding to this consultation the Academy seeks to support and reinforce the recommendations made in the recent Wellcome Trust report: ‘Public Health Sciences: Challenges and Opportunities’.

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Accessed: May 2004

1.5 This response was prepared by a working group chaired by Professor Andrew Haines, FMedSci and has received approval from the Academy’s Council. It focuses on questions 11 and 12 given in the consultation document. The Academy now seeks to work with government and other stakeholders to take this important issue forward.

Section 2 – Question 11: evidence base

Have we got the right evidence to assess the costs and benefits, including impact on inequalities, of current initiatives targeting lifestyle choices?

Have we got the right evidence to understand how the pattern of wider environmental and social determinants can deliver both costs and benefits for public health?

Have we got the right evidence to understand which interventions produce the greatest cost-benefits/reduction of inequalities?

Have we got the right evidence to understand which interventions require joint action by several agencies and how this can be best achieved?

Where are the gaps in the evidence base? How can they be tackled? How should they be prioritised?

How can Primary Care Trusts and Local Authorities improve the data they gather on local populations?

2.1 Public health is a priority area that cuts across departments in central and local government. National focus and a unified voice are required to ensure government policy does not conflict with the public’s health or provide inconsistent messages. As such ‘joined-up’ action across government and other stakeholders is necessary.

2.2 In view of weaknesses in the evidence base for public health policy and practice the Academy warmly welcomes substantial increases in government funding for medical and scientific research. However, the Academy considers that public health requires an overarching strategy with designated funds to set national priorities. Where possible, the Academy recommends building on existing structures rather than creating new ones, for example by strengthening the role of the public health observatories in public health surveillance.

2.3 Prioritisation of public health research should be based on a number of criteria, including the potential to generate new knowledge, which will lead to more effective policies and interventions to address major causes of ill health. Investment in primary research needs to be complemented by sustained support for public health surveillance and systematic reviews of existing research. Thus, in addition to initiating new research, the existing evidence-base should be fully utilised.

2.4 There is no shortage of important potential research directions in public health. For example the:

- effectiveness of interventions and policies that reduce obesity and promote exercise in the community – particularly among low income groups;
- reduction of smoking, alcohol, sexual risk behaviour and drug use among the young;
- and the impact of persistent organic pollutants on health.

These areas serve as illustrative examples rather than as a comprehensive list. Further examples are given in Academy reports and the Wellcome Trust report on public health science.

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4 For example, the Academy’s ‘Calling Time’ report.
2.5 On occasion, public health interventions may require implementation before evidence of efficacy is available, for example in the case of an outbreak like SARS. To address such circumstances the Academy recommends mechanisms to provide emergency research funding should be put in place to ensure that interventions are properly evaluated. (See the Academy’s ‘SARS’ report5). Failure to evaluate public health interventions means that unintended adverse consequences may be overlooked and opportunities to improve public health may be missed.

2.6 The discrete effects of individual public health interventions across all social groups need to be based upon models that reflect major intergenerational trends, such as educational attainment. If they are not, their effects are likely to be overstated. Inequalities in health and wealth in the UK have proved persistent, for example child poverty has increased since 1979 although by some measures it has been declining in recent years6 7. Reductions in social and income mobility are likely to exert profound effects. Research directed at reducing health inequalities is therefore a key priority in view of their persistence in the UK. A summary of the evidence about the social determinants of health and the persistence of inequalities can be found in the WHO Europe document: ‘The Solid Facts’8.

2.7 In many cases more can be achieved through collective action than at an individual level. For example:

- Individuals in the UK have little or no control over three quarters of their salt intake as it is added during manufacture9. In order to reduce salt intake to benefit health society has to take action, either through voluntary agreements with the food industry or if necessary appropriate regulation.
- Whilst the individual ultimately chooses whether to indulge in harmful activities such as smoking, stronger action could be taken to reduce its prevalence through policy levers such as price increases or prohibition of smoking in public places.
- Similarly, in the case of obesity, it is easy to place responsibility with the individual. However, the individual is part of a community where physical activity is generally declining and convenience foods tend to have high calorie content. For example, portion sizes have gradually increased as food has become cheaper10. Firmer government action is required to reduce portion sizes of convenience foods. Government should actively engage with the food industry in actions to improve public health, with the Food Standards Agency playing a more proactive role.

2.8 The particular situation of some vulnerable groups should not be ignored. Patients with severe and enduring mental disorders have largely been discharged to care in the community. There is clear evidence of excess mortality from vascular and smoking related causes, and of obesity, heavy use of cigarettes and poor dietary choices in these groups whose ability to make healthy lifestyle choices may be much restricted11 12 13 14. In addition there is good evidence that the social and economic conditions in which people live are important determinants of their mental health and more research is

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6 As measured by comparing 1979 and 2001/02 figures for risk of children growing up in households with less than 60% of median contemporary income after housing costs.
needed on the potential for improving mental health through policies and interventions outside the health sector.

2.9 Research into public health requires not only funding but also an appropriate environment and infrastructure within which to operate. This is discussed broadly in the Academy’s response to the Treasury/DTI/DfES ‘Science and Innovation’ consultation.\(^\text{15}\)

2.10 Public health goals are often achieved over longer time-scales than those of clinical medicine. Treatment of the sick can sometimes take priority over long-term prevention. In the current climate in the health service it is sometimes difficult for public health to be valued on a par with disciplines with more visible and immediate outputs. This may be a particular issue for public health doctors working in small organisations such as Primary Care Trusts (PCTs). The distinct aims of public health need to be recognised.

2.11 Closer relationships between those involved in service delivery and academic public health should be fostered. Whilst the goals of researchers and service providers are often achieved over different time frames, research should be more closely integrated with public health practice. Well designed interventions that show demonstrable results over relatively short time periods can then potentially be taken up by service providers in the medium to long-term.

2.12 There is a deficit of public health researchers with service experience and there are shortages of service providers with research skills. Practitioners and policy makers should become more involved with the research agenda and researchers should become more involved with providing the evidence-base for service provision and policy making. Partnerships between universities and the NHS are discussed in more detail in the Wellcome Trust report on public health science.

2.13 Information about the health of the public and how it can be improved is needed to underpin rational policy decisions and there are strong ethical, as well as economic, arguments for evaluating policy before and during its implementation. Advances in information technology offer the potential to improve data collection, both to inform local planning and evaluate the impact of new policies and practices. Currently there is a failure to utilize the opportunities provided by a National Health Service to generate high quality clinical and public health data. This is highlighted in the Academy’s ‘Strengthening Clinical Research’\(^\text{16}\) report. Natural and planned experiments offer major opportunities for policy evaluation providing the requisite infrastructure is present. PCTs are too small to fully fill these roles in all circumstances. However, by working together individual PCTs can create synergies that ensure surveillance assists health service provision as well as the proper evaluation of policy impact. This is especially the case once the new GMS contract data are in place. The current research role of PCTs is largely to manage local research governance (see 2.21). Consideration should therefore be given to setting up a network of research active PCTs that could collaborate to evaluate important questions relevant to public health policy and practice. This would complement primary care research networks that mainly focus on evaluation of interventions delivered to individual patients. The Academy recommends that public health interventions undergo ongoing evaluation and that the dynamic interactions between different interventions are assessed. Modelling and piloting interventions would further assist evaluation.

2.14 In order to tackle the public health research agenda, collaboration needs to be forged across PCTs in addition to individual practices. We suggest that a Public Health Research Network of PCTs should be established with the specific objective of promoting multi-centre research aimed at evaluating interventions and policies to improve population health. Such a network should also involve local authorities in view of their potential to improve public health through a range of sectors and close working relationship with

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PCTs. This proposal is analogous to the clinical research networks discussed in the Academy’s ‘Strengthening Clinical Research’ report.

2.15 In the case of primary care research, only a few of the many research networks across the UK have sufficient resource to guarantee high-quality, large-scale data collection facilities. Although initiatives such as eHealth from the MRC\(^\text{17}\) provide exciting opportunities, the community equivalent of the ‘well-found laboratory’ is lacking. ‘Community datalabs’ with compatible ICT systems would enhance the ability of primary care to undertake large-scale clinical trials, prospective studies and randomised controlled trials of public health interventions.

2.16 Government should strengthen support for the development of and access to large computerised databases such as the GP Research Database (GPRD) by UK public health researchers. It is noteworthy that because of the failure of UK government to fully recognise the public health importance of such databases research in topics such as pharmacoepidemiology has been undertaken largely in the US using GPRD data.

2.17 The majority of patient data are on digital practice databases. These should be put into a format that would facilitate research and be analysed by researchers, along the research-service continuum, to see how health patterns are changing quantitatively. This could help provide a needed link between primary and secondary care. The roll out of new NHS ICT systems provides an opportunity to incorporate new data collection protocols for research and development as well as ensure a higher degree of data capture. An integrated national database and harmonisation of surveillance across PCTs would further assist this process.

2.18 To achieve the goals discussed a strong academic base is required. Despite the UK’s status as a world leader in public health research there is an acute shortfall of clinical academics specialising in public health. New leaders are required to continue the international standard research currently being undertaken in the UK. A recent survey of clinical academic medicine in the UK found the number of full time equivalent clinical academics specialising in public health had dropped by 32% since 2000\(^\text{18}\). Amongst those of lecturer grade the decline was 59%. Three London medical schools now have insufficient capacity to train in public health, illustrating the extent of this challenge. For the UK Clinical Research Collaboration to contribute to UK public health the deficit of clinical academics specialising in this field must be addressed.

2.19 More broadly, the public health academic research base requires coordinated long-term investment at all levels - from undergraduate through to professorial. For example, the Academy’s academic bacteriology report recommends improvements in undergraduate education and that joint specialty training in microbiology and infectious disease should become the norm\(^\text{19}\). Lack of training and career structures, financial disparities between academic and service practitioners and lack of funding conspire to perpetuate the sub-critical mass of researchers in academic public health and primary care and blocks the progress of tomorrow’s international standard researchers. Fragmentation caused by restructuring of the NHS and other public health service functions has further eroded the academic base\(^\text{20}\). In addition, support is needed for the research careers of non-medical academics such as health economists, behavioural scientists and statisticians who are crucial to a vibrant public health science research base. Given the growing importance of public health increased investment will be vindicated.

2.20 Because public health is influenced by policies in a range of sectors there needs to be an intersectoral research agenda at both local and central government levels. There is potential for example for major impacts on health from policies in the transport, education, and

\(^{17}\) The Academy is unaware of projects funded under this initiative to date (May 2004), although further information may become available on the MRC website: www.mrc.ac.uk


\(^{19}\) Academy of Medical Sciences (2001) Academic Medical Bacteriology in the 21st century. Available from: www.acmedsci.ac.uk

housing and agricultural sectors but little research has been undertaken on their contribution. More health impact assessment of policies is therefore required. This in turn requires better evidence about the links between policy initiatives and health through research.

2.21 Regulation and legislation such as the Human Tissue Bill and Data Protection Act can, sometimes inadvertently, be an impediment to research in the public health sciences. Under the current framework vital research can be delayed a year or more. This is in stark contrast to the areas of service delivery and health policy where innovations may be implemented without the need for ethical oversight or evaluation, despite the potential for positive and negative impacts. Continued long-term collection and use of population health data is crucial to monitoring and improving the public's health. Whilst the Academy agrees that the public must be protected from the inappropriate use of personal information and recognises willingness in government to listen to the concerns of researchers, we reiterate our call for the current regulatory framework to be streamlined. Although steps are being taken to remedy the situation, there is a delay between today's policy initiatives at central government level and public health research and provision on the ground. Action must therefore be taken now to safeguard the future research environment. Measures such as allowing regulatory checks on researchers to be transferred between PCTs or checks by lead research PCTs to act as benchmarks for others would help alleviate the regulatory burden. Issues such as research sponsorship and interpretation of the Data Protection Act also need to be resolved. In addition less burdensome research governance and ethics approval processes are also required. The following case study illustrates some of the problems:

### Case Study: governance issues

The PREDICT research project is being led by the Royal Free Hospital and University College Medical School in collaboration with six other European countries. Its aim is to develop a multi-factor risk score to predict depression in general practice and assist primary care professionals in anticipating the depressive episodes of their patients.

Thirty General Practice Research Framework practices were recruited to facilitate recruitment of patients. A number of difficulties were encountered. These included:

- A number of the PCTs that were contacted in relation to this project were unaware of what documents and information they required to give approval. Responses varied from requesting all the information available on the project to asking the researchers themselves what information the PCT required in order to give approval.

- Several PCTs enquired what information other Trusts had requested. When informed, they were generally amenable to the guidelines proposed by other PCTs.

- Several Trusts were more hesitant and wanted to delay Trust approval until October 2003 when they believed that they would receive documentation that would guide them in the governance process.

- It was understood by some Trusts that they abided by the decisions of other neighbouring Trusts before giving approval themselves but frequently the process for this relationship between the Trusts was uncertain and led to considerable delay.

- In several cases, achieving a working level of communication between the relevant Trust research contact and the Royal Free proved to be very difficult with long delays and little or no response to regular telephone or postal correspondence.

- When the relevant advice was given to the Royal Free from the Trust, as regards the required information for Trust approval, this advice often changed when the documentation arrived and so several packages might be sent in order to follow changing advice.

It was common for delays of up to four months to occur in achieving Trust approval as a result of the bureaucratic issues mentioned above and a general inertia in the process.
2.22 There is great potential for public health research to be internationally applicable, for example the classic studies about doctor’s mortality and smoking\(^{21, 22}\). However, the UK does not always capitalise on the many opportunities to conduct outstanding international research. Many interventions relevant to public health are introduced without adequate scientific underpinning or evaluation in place. Therefore, a particular priority is to ensure that robust measures of impact on policy and practice are developed and implemented in the next Research Assessment Exercise (RAE). Strengthening the scientific basis of policy through better training of practitioners and development of the academic base should help to improve the performance of public health sciences at the next RAE. Furthermore, funding to enable large-scale intervention studies to be undertaken will increase the quality and relevance of public health research and ensure that it is appropriately recognised.

2.23 The Academy is concerned that certain public health issues such as mental health, alcohol abuse/addiction and infectious disease are only briefly discussed in the ‘Choosing Health?’ consultation document and suggests that these need greater emphasis. Interestingly, where matters of infectious disease are concerned individuals often are less able than government to make choices. Public health science is part of a research continuum from basic to clinical and better links need to made between basic sciences which are yielding many advances (for example in human and pathogen genomics) and public health sciences, in order to evaluate their potential impact on population health. (Infectious diseases are discussed in more detail in the Academy’s ‘Academic Medical Bacteriology in the 21st century’\(^{23}\) and ‘SARS’ reports.)

2.24 The diversity within Europe provides a unique series of natural experiments from which it is possible to learn much about the determinants of population health and efficacy of interventions\(^{24}\). For example, despite recent declines, mortality from heart disease remains over twice as high in the UK as in Spain. However, declines of over 50% in some Northern European countries over the past 30 years demonstrate the scope for further large-scale improvements. Specifically there is a need for research that takes advantage of European diversity to understand why the UK has a life expectancy below the original EU 15 average and what lessons can be learned from other countries that will produce improvements. To leverage this potential the UK should exert its influence on the EU research community to give greater priority to public health research funding. In addition, a coherent public health system should be forged across Europe building on better national surveillance and intervention evaluation discussed in this response.

Section 3 – Question 12: disseminating information

What are the most effective ways of disseminating health information and good practice to the general public, the NHS, education, employers, other relevant organisations?

3.1 Important research findings need to be disseminated to the media and public health practitioners in clear accessible ways. In the future research funding might need to recognise the costs of this improved dissemination effort.

3.2 There is already a substantial evidence-base in the UK about public health. Therefore, it is important that the existing evidence is used to determine policy by government and others in a transparent and consistent manner. The political balance between public health and other factors, such as economic growth, needs to be open to public scrutiny. Furthermore, researchers need to understand how government and other stakeholders use the evidence they provide.

3.3 Choice is key to the effective dissemination of health information and this consultation more broadly. Many aspects of this are beyond the scope of the Academy’s response. However, we wish to establish that whilst ‘choice’ is ultimately down to individuals, it is very much affected by the environments within which they live and work. For example, as the Academy’s “Calling Time”25 report demonstrates, over the past 30 years changes in the price of alcohol have closely mirrored changes in its consumption. There is also clear evidence availability affects consumption. It is impractical for all individuals to know everything that they need to know to improve their health. In some circumstances, individuals need to trust public health authorities to take actions in support of their interests. This relationship of trust is crucial if public health measures are to be successfully implemented.

3.4 Population-based approaches to research and harm-reduction, as advocated in the Academy’s ‘Calling Time’ report, further reinforce the messages in the second Wanless report about net improvements in public health and potential reductions in social class health inequalities from public health approaches.

3.5 At the heart of this, research is needed into the factors that influence individual choice, for example socio-economic status and ethnicity, to help determine the roles and responsibilities of individuals and government for health. Regulations need to be simple, clear and flexible. Health education should be conducted in parallel so that the public understands and is aware of the decisions and direction the Government is taking in support of public health. An appropriate balance between the responsibilities of individuals and government needs to be struck to guarantee the public’s health.

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The Academy’s Officers are: Sir Keith Peters, FRS, PMedSci (President); Lord Turnberg, FMedSci (Vice-President); Sir John Skehel, FRS, FMedSci (Vice-President); Sir Colin Dollery, FMedSci (Treasurer) and Professor Patrick Vallance, FMedSci (Registrar).

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**DISCLAIMER**

The members of the Working Group participated in the production of this response purely in an individual advisory capacity and not as representatives of, or on behalf of, their individual affiliated hospitals, universities, organisations or associations. Their participation should not be taken as an endorsement by these bodies.