# The Academy of Medical Sciences

## Response to the consultation on the public health white paper 'Healthy lives, healthy people'

## Overview

Many future health challenges such as pandemics, ageing and obesity can only fully be addressed through public health measures that improve the health and well-being of the population as a whole.[1] Recent advances in medical science in areas such as our understanding of the social determinants of health, the cognitive-neuroscience basis of behaviour and the use of population data, offer extraordinary opportunities to intervene to improve public health and to evaluate these interventions.

In reorganising the UK's public health system the Government must ensure that it draws upon the UK's world-class strengths in epidemiology and public health research to build on recent public health successes such as restriction of smoking in public places, reducing the salt content of processed foods and the introduction of a new meningitis vaccine.[2,3] The many causes of disease and corresponding opportunities for intervention require the development and implementation of a cross-governmental strategy for public health. The forthcoming UN General Assembly on chronic non-communicable diseases demonstrates international interest in public health and provides the UK Government with the chance to show leadership in overcoming the political barriers that inhibit progress.[4]

The Academy of Medical Sciences welcomes the opportunity to respond to the Government's consultation on the public health white paper 'Healthy lives, healthy people'.[5] As the independent body in the UK representing the whole spectrum of medical science with a Fellowship that includes some of the UK's foremost experts in public health the Academy is well placed to contribute to future public health strategy in England.

The Academy welcomes the emphasis that 'Healthy lives, healthy people' puts on research evidence, the social determinants of health, health inequalities, prevention and a life course approach, as well as the new National Institute of Health Research (NIHR) School for Public Health Research and the NIHR Policy Research Unit on Behaviour and Health. We are however concerned about the scale and speed of change that risks substantial disruption and loss of expertise along with valuable data. To ensure that public health research forms one of the foundations of the new public health system the Academy has identified six areas for action by Government that are detailed further below:

- Putting research at the heart of public health

---

[1] Academy of Medical Sciences (2010). *Reaping the rewards: a vision for UK medical science* http://www.acmedsci.ac.uk/p48prid78.html
[2] McKee M *et al* (2011). *Public health in England: an option for the way forward?* The Lancet DOI:10.1016/S0140-6736(11)60241-9
[3] Food Standards Agency (2008). *Dietary sodium level surveys* http://www.food.gov.uk/science/dietarysurveys/urinary
[4] Beaglehole R and Hoprton R (2010). *Chronic diseases: global action must match global evidence.* **376**, 1619-1620
[5] Department of Health (2010). *Healthy lives, healthy people: our strategy for public health in England* http://www.dh.gov.uk/en/Publichealth/Healthyliveshealthypeople/index.htm

- Ensuring a unified approach to public health
- Securing independent advice
- Implementing evidence based public health policies
- Encouraging the exchange of knowledge between researchers and practitioners
- Identifying future opportunities for public health science

## Putting research at the heart of public health

Over recent years the NIHR and the Office for the Strategic Coordination of Health Research (OSCHR) have done much to embed research in the UK's health system and better coordinate research activities across academia, the NHS, charities and industry.[6] The prominence of evidence and research in both the 'Healthy lives, healthy people' white paper and the Health and Social Care Bill are also important steps forward.[7][8]

For research to be at the heart of public health it must be embedded at all levels of the public health system. The Government's current proposals, however, only stipulate that some components should promote research. Without the explicit duty for the various levels of the public health system to promote and engage with research then it would be easy for public health research to be subsumed by competing priorities. This is especially important for local authorities that do not have the same history of engagement with research as other parts of the health system, which has improved following the efforts of the NIHR within the NHS over the last five years. To generate a flourishing research culture among the public health workforce the use and evaluation of evidence must continue to form part of the core training for public health specialists. This will help ensure that there is capacity to constantly re-evaluate public health policy and practice, which is vital to success in this area.

**We propose that:**
- **There should be a duty to promote and engage with public health research throughout the new public health structures including Public Health England, the National Commissioning Board, Commissioning consortia, all 'willing providers', Monitor and local authorities.**
- **The NHS Commissioning Board should include a strong champion for research such as the Chief Medical Officer.**

## Ensuring a unified approach to public health

Dividing responsibility for public health between the Department of Health and local authorities risks fragmentation given the interdependency of health protection, health promotion and health service delivery domains of public health. Pulling them apart is likely to have negative consequences that

---

[6] Academy of Medical Sciences (2010). *Reaping the rewards: a vision for UK medical science* http://www.acmedsci.ac.uk/p48prid78.html

[7] Department of Health (2010). *Healthy lives, healthy people: our strategy for public health in England* http://www.dh.gov.uk/en/Publichealth/Healthyliveshealthypeople/index.htm

[8] HM Government (2011). *Health and social care bill 2010-11* http://services.parliament.uk/bills/2010-11/healthandsocialcare.html

include unnecessary duplication of activities by local authorities, some of which are too small to support a critical mass of expertise. This is a particular problem in London and is experienced by the current PCTs whose boundaries often co-inside with London boroughs. Placing part of the public health function with local authorities would mean that some public health professionals would have less access to training, validation and the evidence base as these are often accessed through higher education institutions, which are themselves typically linked to the health service rather than local government. Effective links need to be developed between academia and the various parts of the public health system.

Routine national surveillance, monitoring and evaluation through mechanisms such as cancer registries and mortality statistics are cornerstones of successful public health that are in danger of dilution if the public health system is fragmented. While localism is important, excessive focus on this level should not distract from public health actions at the regional and national level such as implementation of National Institute of Clinical and Health Excellence (NICE) Guidelines or regulation. One example is sexual health and HIV services where under the proposed arrangements commissioning appears split between local authorities, national commissioning and GP commissioning, with national responsibility for surveillance lying with Public Health England (PHE).

Ring fenced budgets in local authorities for public health are certainly welcome providing that this can actually be assured. We are unsure how proposals for ring fenced budgets for public health will be reconciled with the recent statement by the Secretary of State for Communities and Local Government that there will be no ring-fencing of local government budgets.[9] Assuming ring fenced budgets for public health are indeed available care should be taken to ensure that, following recent cuts in the budgets of local authorities, existing activities are not rebadged as 'public health'.[10] We are also concerned that while responsibility for some elements of public health will lie with local authorities they will gain no additional regulatory powers to address many of the wider social determinants of health. Placing public health functions with local authorities does have advantages such as encouraging a more cross cutting approach to public health across Government.

A major concern is that the placing of public health doctors in local authorities and PHE will mean these staff will become local authority employees or civil servants and so lose their NHS terms and conditions. This could create a two tier work force that would create real disincentives for doctors to pursue careers in public health and would also reduce the independence of such medical practitioners. The distance between elements of the public health system and the NHS will mean clinical academics in public health, which are vital to the success of public health, will be uncertain of their service contributions and may find it difficult to maintain their Honorary Consultant status, which is currently largely held in Primary Care Trusts (PCTs). This may again discourage clinicians from pursuing the public health research that provides the evidence base critical for public health practice.

To ensure quality and parity public health training for medical doctors should sit alongside training in other medical specialities, although there may be value in encouraging greater specialisation among

[9] Pickles E (2011). *We will let Councils make their own decisions.*
http://www.conservatives.com/News/Speeches/2011/03/Eric_Pickles_We_will_let_councils_make_their_own_decisions.aspx
[10] McKee M *et al* (2011). *Public health in England: an option for the way forward?* The Lancet DOI:10.1016/S0140-6736(11)60241-9

public health physicians while maintaining standards in core competencies. Public health professionals must be educated to a common standard set by the Faculty of Public Health.

**We propose:**
- **A clear system to link the public health function of local authorities to Public Health England through mechanisms, such as dual employment and accountability of Directors of Public Health to local authorities and Public Health England.**
- **That doctors specialising in public health should retain NHS terms of employment in the new public health system.**

## Securing independent advice

Independent public health advice is vital for building public trust and delivering better public health outcomes. The Government's plans to place PHE within the Department of Health will reduce the independence of its public health advice and seems to conflict with the Government's stated goal of liberating health from political control.[11] With respect to surveillance and health protection research, we note that the proposed move of the Health Protection Agency (HPA) functions to PHE is already threatening its ability to apply for and undertake independently funded research. Mechanisms are needed to ensure that health protection research can continue to flourish through partnership with researchers in universities and other research institutions.

We are also concerned about the prominent role given to the food and drink industry in developing public health policy through the Public Health Responsibility Deal. While it is important to engage with the many stakeholders involved in the wider determinants of health, the commercial interests of the food and drink industry can conflict with those of public health.

**To ensure the independence of its public health advice the Government should consider placing Public Health England outside the Department of Health, possibly as an NHS special authority or executive agency.**

## Implementing evidence based public health policy

Public health policy should be firmly rooted in the best available public health research evidence. Recently the Government has put considerable emphasis on 'nudging' as a strategy for promoting public health. However, we are concerned that evidence to support the effectiveness of nudging as a means to improve population health and reduce health inequalities is weak; reflecting both the absence of evidence as well evidence of limited effect.[12] We are also greatly concerned that the Government has not engaged with recent evidence-based guidelines from the National Institute for Health and Clinical Excellence (NICE) aimed at improving population health.[13,14] While we welcome the

[11] Department of Health (2010). *Healthy lives, healthy people: our strategy for public health in England* http://www.dh.gov.uk/en/Publichealth/Healthyliveshealthypeople/index.htm
[12] Marteau T *et al* (2011). *Judging nudging: can nudging improve population health?* BMJ, **342:**d228
[13] National Institute for Health and Clinical Excellence (2010). *Prevention of cardiovascular disease at the population level* http://www.nice.org.uk/nicemedia/live/13024/49273/49273.pdf

Government's stated willingness to move up the ladder of public health interventions described by the Nuffield of Bioethics, we believe that Government should be willing to use the measures from whatever rung of the ladder is most appropriate rather than starting at the bottom and moving up. [15,16] We believe that such decisions should be driven by research evidence and reflected in public health policy.

**While further research is needed into the role of nudging as a public health tool, Government should not focus exclusively on this particular policy lever. Instead greater attention should be given to population level measures to improve public health such as regulation and selective taxation for which there is generally strong research evidence of efficacy.[17,18]**

## Knowledge exchange

The knowledge base that underpins public health practice is often complex, difficult to generalise and changes swiftly so requires constant evaluation. Currently there is too wide a gap between those involved in the provision of public health services and those involved in public health research so practice is too often not informed by research and vice versa. The idea that research progresses in a unidirectional manner from basic research to applied research is not a suitable model for public health research.[19] Instead, we need to facilitate an iterative cycle of knowledge exchange between those involved in research, service provision and funding. This requires that the whole of the public health workforce have critical evaluative skills and that research is an integral part of the public health system. Measures that might improve the exchange of knowledge between public health researchers and public health practitioners include:

- Funders should provide incentives for collaboration between researchers and practitioners through mechanisms such as 'braided' funding whereby financial resources are brought together from different sources with tracking and accountability maintained separately for each source.
- A public health research network based on the clinical research network model would provide an interface with public health practitioners and other relevant networks, such as the Primary Care Research Network.
- Although it should not take precedence over excellence, greater weight should be given to the impact on policy and practice when judging the success and funding of public health research.

[14] National Institute for Health and Clinical Excellence (2010). *Alcohol use disorders: preventing the development of harzardous and harmful drinking* http://www.nice.org.uk/nicemedia/live/13001/48984/48984.pdf
[15] Department of Health (2010). *Healthy loves, healthy people: our strategy for public health in England* http://www.dh.gov.uk/en/Publichealth/Healthyliveshealthypeople/index.htm
[16] Nuffield Council on Bioethics (2007). *Public health. Ethical issues.* http://www.nuffieldbioethics.org/public-health
[17] Academy of Medical Sciences (2006). *Academy of Medical Sciences' response to the Nuffield Council on Bioethics consultation on 'public health. Ethical issues'* http://www.acmedsci.ac.uk/p100puid67.html
[18] Academy of Medical Sciences (2004). *Calling time: the nation's drinking as a major health issue* http://www.acmedsci.ac.uk/p48prid16.html
[19] Ogilvie D *et al* (2009). *A translational framework for public health*. BMC Public Health, **9**, 116

## Identifying future opportunities for public health science

Extraordinary recent advances in science and technology offer major research opportunities in public health. Priorities for future research include:
- The use of large datasets derived from routine patient care
- The use of genetics to provide molecular epidemiology for tracking infectious disease
- The relationship between population level research and genetics such as understanding the interaction between  environmental and genetic factors in disease causation
- Pharmacoepidemiology through mechanisms such as the General Practice Research Database (GPRD) and Yellow Card System
- Changing health behaviours using interventions that can be delivered at population, community and individual levels, that can improve population health as well as reduce health inequalities
- Evaluation of public health interventions, particularly those that prevent disease
- Standardisation of research outcome measures and service delivery outcome measures to allow better exchange of knowledge
- Understanding the distribution of disease within the population including the use of surveillance data for research such as cancer registries and community serological surveillance for influenza to understand the distribution of disease within populations
- Epidemiological research into chronic diseases with 'softer' endpoints that are more difficult to measure such as musculoskeletal or mental health
- Health services research
- Further research into the social determinants of health including effective interventions to reduce health inequalities
- Investigation of the impact of environmental change, including climate change on public health
- Evaluation of the benefits of sustainable low carbon technologies and lifestyles for public health
- Studying the impact of policies across a range of sectors for public health – e.g. education, social policy, housing, transport

It is essential that public health professional have access to research training to take forward the ambitious research agenda set out above. There will also need to be training and investment in the complex informatics required to support this activity.

---

### The Academy of Medical Sciences
The Academy of Medical Sciences promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society. Our Fellows are the UK's leading medical scientists from hospitals and general practice, academia, industry and the public service.

Academy of Medical Sciences
41 Portland Place
London W1B 1QH
UK
Tel:      +44 (0) 20 3176 2150
E-mail: info@acmedsci.ac.uk
Web:     www.acmedsci.ac.uk
Registered Charity No. 1070618
Registered Company No. 35202