

Society for Social Medicine response to UKCRC Public Health Research Consultation

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INTRODUCTION

1. **The Society for Social Medicine** endorses the analysis and conclusions of the Wellcome Trust Report 'Public Health Sciences: Challenges and Opportunities'¹.
2. The first question in the UKCRC's consultation invitation refers both to '*improving health*' and to '*reducing health inequalities*'. It is important to note that although there have been marked improvements in the overall health of the UK population in the last few decades, the benefits have been experienced unequally; death rates have fallen faster among more privileged social groups.

Well-intentioned health promotion policies (of the sort recommended in the White Paper, '*Choosing Health*'²) may actually increase, rather than decrease, inequalities in health. More advantaged groups in society may be more accessible to interventions and find it easier, because of better access to resources such as time, finance, and coping skills, to take up health promotion advice (e.g. to give up smoking, improve diet) and preventive services (e.g. dental check ups and cervical screening). There is also some evidence that poorer sections of society may receive less benefit from lifestyle change or access to services (because their health may already be compromised by other factors)^{3, 4}.

Thus two public health goals, to improve population health and to reduce health inequalities, may sometimes conflict. Targeting public health efforts at the already advantaged may produce aggregate health gain at relatively little cost, whereas targeting the disadvantaged may produce less aggregate health gain and at greater cost.

It is also important to note that there is a distinction, often obscured in documents such as the Wanless Report⁵, between the 'determinants of health' and the 'determinants of inequalities in health'. As Graham and Kelly note:

The commitment to addressing underlying causes is often summed up in the phrase 'tackling the determinants of health and health inequalities'. Such phrases can create the impression that policies aimed at tackling the determinants of health are also and automatically tackling the determinants of health inequalities. What is obscured is that tackling the determinants of health inequalities is about tackling the *unequal distribution* of health determinants⁶ (p5).

Thus in developing a strategy for public health research the UKCRC needs to be aware that research into health improvement may not be the same as research into reducing inequalities in health, and that research into the social determinants of health (e.g. Why do people smoke?) may not be the same as research into determinants of health inequalities (e.g. why do poor people smoke?).

3. The balance between individual choice and state protection is critical in public health. In the Wanless Report it is stated that: "individuals are ultimately responsible for their own and their children's health"⁵. In *Choosing Health*,² there is an emphasis on the informed consumer making healthy choices, rather than on government action to regulate structural factors which might impinge on public health (e.g., fiscal policies, the content of food, investment in employment, housing standards). It is important that public health research addresses all points of the continuum from macro, structural, factors to individual behaviour rather than concentrating solely on the latter. As UKCRC operates with a remit for coordinating **clinical** research there is some concern that it will adopt a perspective that acknowledges the political macro-determinants of health and health inequalities, but views these as outside its remit. We

would urge the UKCRC not to take this view, and suggest it uses a framework, adapted from the Netherlands⁷ that will enable relevant public health research to be conducted.

What are the key areas in which public health interventions would have the most impact in improving health and reducing inequalities?

As a number of commentators have noted, the current research base does not provide a clear answer to this question, since not enough is known about the relative effectiveness or cost effectiveness of different interventions, and interventions which improve aggregate health may not reduce health inequalities.

An important step is the implementation and extension of the Acheson Inquiry's recommendation that all policies likely to have an impact on health should be evaluated in terms of their impact on health inequalities⁸. Public and private sector policies, programmes and projects should be monitored to assess their effects on population health and also on inequalities in health.

In relation to research on reducing health inequalities, it is important to synthesise existing evidence on feasibility, acceptability, effects on outcomes, costs and cost-effectiveness, and then to define researchable questions in each of the following areas:

- **Interventions to reduce socioeconomic disadvantage** (e.g. fiscal policy, income support, pensions and benefits systems, the education system, housing and area regeneration).
- **Interventions to reduce the effects of health on socioeconomic disadvantage** (e.g. expanding work participation, improving benefit levels, developing integrated health and social services for disabled people and the long-term ill).
- **Interventions on factors mediating the effect of socioeconomic disadvantage on health** (e.g. reducing local barriers to healthy living, improving quality of housing stock, reducing rates of smoking, obesity and inactivity, and improving diet, among socially disadvantaged groups).
- **Interventions to improve accessibility and quality of health care** (e.g. streamlining exemption from NHS charges for people from lower socio-economic groups, improving primary care in poorer areas, integrating local authority and national health services for people with mental illnesses, long-term chronic diseases, and frail elderly people).

What are the knowledge gaps and impediments that may prevent us taking forward appropriate interventions?

- Public health and health promotion practitioners are often reluctant to subject their policies, practices and projects to the sort of robust examination now required in health care. Given that such policies, practices and projects involve considerable costs and could be ineffective or harmful, this is a major impediment^{9,10}.
- The: 'misconception ... that a solution to a biological or clinical problem, found at, say, the molecular level, can be equated to "the" solution of the problem for a population'¹¹.
- Poor understanding of the role of macro-level, politically determined, factors in affecting population health or health inequalities.
- Governments feel the need to take actions and roll out policies even when there is no evidence for their effectiveness¹². There is often little or no evidence that policies or interventions proposed by government (e.g. health trainers²) are effective.
- Large randomised trials of preventive measures such as lifestyle changes do not attract investment by the pharmaceutical industry¹¹.
- Limited recognition and funding of research to identify and understand the determinants of health and inequalities in health, and the mechanisms by which they may be changed. Effective interventions will not be identified unless this basic social science research and formative evaluation is given higher priority.
- Interventions and associated research to deliver improved public health are necessarily large scale and multidisciplinary. Despite welcome recognition of the importance of public health/prevention research by Wellcome¹, Cancer Research UK¹⁴, and Medical Research Council¹⁵, current funding mechanisms are set up to give advantage to focussed, single discipline, disease specific 3-year projects. Major barriers are membership of funding boards, available funding periods, and the management of multi-institutional grants.

- Weakened integration of and dialogue between academic researchers on the one hand and policy / practice on the other. This a key barrier to identification of needs, innovative practice, and opportunities for natural experiments. Equally it leads to poor implementation in practice of well-researched effective interventions.
- Unlike most of UKCRC, the NHS is not the major setting for public health interventions and research. Mechanisms are needed to engage with policy makers, practitioners and settings outside the NHS. Intervention and service costs available via NHS Trust R&D funds are not available to researchers evaluating non-NHS interventions, increasing the cost and reducing the competitiveness of such project proposals.
- Public health relevant policies are usually introduced in ways that prevent robust evaluation. Non-randomized methods can be applicable, but robust designs are often expensive to conduct.
- There are long time lags between the introduction of policies or practices and health outcomes.
- Difficulties arising from interpretation of current data protection legislation that is inhibiting anonymised record linkage for public health research.
- Expansion of private sector health service provision without a parallel information and audit system accessible to health service researchers, and no commitment by the private sector to take part in relevant research.
- General issues of the appropriateness of ideas of cost-effectiveness as a means of making health care decisions¹³.
- Academic sector public health departments have difficulty in recruiting high calibre staff, and many lack the inter-disciplinary capacity to conduct internationally competitive research.
- Successive reorganisations of the public health function have resulted in major loss of capacity at local levels.
- Lack of interest in public health research by major funders, in contrast to their enthusiasm for biomedical research, has been a major limiting factor.
- The University Funding Councils' Research Assessment Exercise, which has tended to inhibit applied or public health research.

What are the best ways to meet capacity needs and where are the major resource gaps?

- Cross-funder investment in centres of excellence. Public health research is of necessity interdisciplinary and involves skills from the biological and social, as well as medical, sciences. Cross-council funding has been developed for some initiatives where the need is self-evident (e.g. the New Dynamics of Ageing programme) but this approach could be expanded.
- Increased investment in personal awards, and particular encouragement of multidisciplinary candidates/projects (not just 'interdisciplinary' as defined by ESC/MRC fellowships)
- Restoration of fit-for-purpose public health departments, and exploiting the potential of the Health Protection Agency.
- Some successful training schemes in clinical epidemiology have been abandoned without good reason. Their re-introduction would be helpful in bridging the gap between population research and clinical research.
- Structures to improve communication between policy/practice and research communities, particularly the early identification of opportunities for natural experiments

How can we build on strengths that exist in the UK?

- There is a long tradition of major achievement in UK public health research: the sanitary reforms of the 19th century; discovery of the adverse effects of smoking; smallpox and polio eradication; recognition of the continuous distribution of risk from blood pressure, cholesterol etc; early life origins of chronic diseases; use of genetic polymorphisms to study environmental determinants of disease; randomized trial, systematic review, and meta-analysis methodologies; and multi-level mathematical modelling. We need to capitalise on these strengths by continuing to support initiatives such as the HTA programme, Cochrane and Campbell Collaborations, and training in epidemiology, management science, health

economics and statistics. Studentship and fellowship programmes should be complemented by good quality taught courses in centres of excellence.

- The opportunity for research and development in public health is unparalleled. The current NHS R&D initiative, comprising HTA, policy programmes of research and special initiatives has changed the NHS climate towards use of evidence in clinical practice. The planned NHS R&D investment in public health is important as this will provide the means for public health to play a full role in evaluating public health practices.
- NHS information strategy. The NHS Information Strategy is of key importance in providing relevant linked electronic data on needs and outcomes of health service interventions. Access to private health care sector data is essential. The Involvement of public health interests in determining the structure, range and use of linked datasets will be vital, and the support of major funders (Medical Research Council, Wellcome Trust, NHS R&D) in facilitating long-term NHS data linkage of relevant anonymised individual patient data sets will be required.
- The strong tradition of clinical epidemiology and interdisciplinary collaboration – exemplified by the Society for Social Medicine – needs to be maintained. This is increasingly difficult given the funding emphasis over the last few decades on biomedicine and genetics. Established, tenured and secure posts for public health researchers from a wide variety of backgrounds in both service and academic public health are essential and should be created. Basic and top-up training in relevant methodologies needs to be improved to increase the range of skills individual researchers possess.

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