

Research in the UK Public Health system

Meeting summary, 28 November 2013

Background

As part of its wider work on public health, the Academy hosted a joint meeting with Public Health England (PHE) on 28 November 2013 to examine the interface between research and public health delivery in the UK and to help shape the development of PHE's Research and Academic strategy.

PHE is an executive agency of the Department of Health that began operating on 1 April 2013. Its formation came as a result of changes outlined in the Health and Social Care Act 2012. It is responsible for the implementation and leadership of public health at the national level. PHE took on the roles of the Health Protection Agency (HPA), National Treatment Agency, Public Health Observatories, cancer registries and a number of other health bodies.

At this meeting proposals for PHE's draft Research and Academic strategy were presented.¹ The strategy's structure has been adapted from that used by the Crick Institute, namely a set of strategic priorities and a set of persisting questions that research activity could address.² PHE hopes that this structure will facilitate contributions from others, to promote alignment without being prescriptive. The strategy is anticipated to cover three to five years but also to outline objectives currently in place. Annual reviews will be published to highlight strategic achievements.

The aim of this meeting was to obtain further feedback and input – following on from [a June 27 meeting](#) - on proposals for PHE's draft Research and Academic strategy, including identifying appropriate outcome measures and any omissions. This meeting brought together researchers, representatives from Public Health England, the Department of Health, research funders and public health practice.

Attendees are listed in the Annex. The meeting was chaired by Professor Robert Souhami CBE FMedSci, the Academy's Foreign Secretary.

Key issues raised

The key conclusions of the meeting were that:

Integration between public health research and public health practice is needed to ensure that research is translated into practise.

This will require a multi-tiered effort to: change training to ensure we maintain and build a 'research-ready' public health workforce; change working practices to facilitate practitioners to undertake research; and foster a local authority culture to 'ask for evidence'. PHE has the opportunity to take a key role in delivering these changes.

¹ Slides are available at <http://www.acmedsci.ac.uk/policy/policy-projects/public-health-england-research/>

² <http://www.crick.ac.uk/strategy/>

- **Many public health practitioners report that they are sufficiently skilled and keen to undertake research, but their working environment is discouraging or not facilitative. A change in culture and working practices is needed to address this.** These practitioners feel that time constraints and managerial influence appear to be inhibiting participation in research. A culture where participation of practitioners in research is not only possible but also encouraged should be developed.
- **To facilitate this process, the training of practitioners should include appreciating the possibilities and benefits of research linked to practice. Relevant curricula must be adapted to reflect this.** Curricula in all key disciplines should be reviewed to ensure that individuals entering the public health workforce are 'research-ready'.
- **An 'ask for evidence' culture needs to be fostered in local authorities.** To develop such a culture, the research community and PHE will need to learn to 'speak the language' of local government. For example, researchers need to be aware that local authorities are particularly concerned with the wider societal impacts of public health interventions.

Actions required

In the long term, PHE should consider:

- Playing a key role in developing a country-wide network comprising researchers, practitioners and local authority representatives to develop a growing cadre of effective researcher-practitioners. This could potentially build from their engagement with the Local Authorities Research & Intelligence Association (LARIA).³

In the short term, PHE should consider:

- Influencing the curriculum for training of public health practitioners by responding to the consultation launched by the Faculty of Public Health.⁴
- Encouraging the recognition of the importance of research in public health practice through their engagement with local authorities.

The pathways for public health training and career progression must be strengthened for all relevant disciplines.

Echoing the points made at the June meeting, the clarity of career pathways was again discussed, with particular reference to clinicians.

Public health research should have an operational evaluation component to allow research findings to be efficiently translated into practise.

Research must seek not only effective interventions, but also examine the most effective ways of implementing interventions in practice. This requires studies that evaluate different modes of delivering an intervention. There is less funding available than previously for such operational evaluations: it may be necessary to advocate for further funding. An example of facilitating such studies and the efficient use of funding is that of the NIHR School for Public Health Research (SPHR). SPHR is helping researchers design operational evaluations and is producing guidelines for wider dissemination.⁵

³ <http://www.laria.gov.uk/laria/core/page.do?pageId=663243>

⁴ www.fph.org.uk/curriculum_review_consultation

⁵ <http://sphr.nihr.ac.uk/>

Actions required

PHE should monitor the resources available for operational evaluation studies, and advocate for further funding if necessary. PHE should also provide advice to local authorities on how to access those resources.

Large population-based data sets are essential to the field of public health. PHE should facilitate straightforward access to centrally held datasets, and their linkage, to support research.

At the June meeting it was stressed that PHE is ideally positioned to be a central host for epidemiological (including surveillance) data and some disease registries, and to ensure maximum benefit from existing registers and other population cohorts. In its efforts to create a central reserve for data, PHE will need to work alongside the Health and Social Care Information Centre as well as higher education institutions, which hold many large research databases and population/clinical cohorts.

- **PHE is working to become the custodian of many existing key datasets and build new data resources. PHE plans to facilitate researcher access to these data.** PHE are currently establishing their infrastructure for centralised data repositories. Many of their new data resources will be modelled on the National Cancer Information Network.
- **Quality and linkage of data resources - both healthcare and wider data - will be essential for effective public health research.** Healthcare data are necessary for public health research, and health data resources must be well maintained to enable effective research. However, public health research also requires other data, for example concerning transport and housing, to understand the relationships between environment, intervention and outcome. Access to these data, and their linkage to health data, will be essential for effective public health research in these domains.
- **Data linkage will present a significant challenge for PHE.** PHE undertakes both research and surveillance, and collects data for both of these functions. However, the data governance requirements are different for the two data types, most notably regarding consent. PHE will need to develop clear guidelines on data governance if both types of data are to be linked.
- **Opportunities will be presented by linked data:**
 - **A comprehensive public health data system could stratify interventions.** Variation in effectiveness of public health interventions is already apparent. Linked data allow research into effectiveness that might improve the efficiency of public health methods and reduce inequalities that arise from using interventions of variable efficiency.
 - **Established data should be used to generate new understanding.** Analysis of existing data, particularly once linked, could allow the generation of new understanding, for example regarding protective and behavioural risk factors.

Actions required

PHE should:

- Work with other data controllers to facilitate amalgamation and linkage of datasets.
- Work with stakeholders to develop guidelines and governance for the collection, management and sharing of new population health data.
- Effectively facilitate researcher access to these data.

PHE should continue joint working with stakeholders to reinforce its role in the complex landscape of public health.

As noted at the June meeting, structural changes and increased funding for aspects of public health in recent years has resulted in a more complex public health system. Having inherited many and varied responsibilities, PHE must be efficient with available resources, and is seeking to undertake joint work wherever possible.

- **The formation of the new Health Protection Research Units (HPRUs) involved a model of grant submissions by academic units with PHE that should serve as a starting point for ongoing joint working.** In November 2012 the NIHR launched a competition to designate and fund new Health Protection Research Units (HPRUs) in England.⁶ HPRUs will be partnerships between universities and Public Health England (PHE) in a range of priority areas. The HPRUs will act as centres of excellence in multi-disciplinary health protection research in England and will complement existing NIHR funding streams. The competition process was found to be very positive and forged collaborations and consortia that would not have otherwise formed. The Department of Health plans to publish the results from this competition early in the New Year, with analysis of the competition process published at a later date.

Actions required

PHE should:

- Continue to pursue joint working, using a collaborative model built on that used for the recent HPRU funding competition.

Other issues raised

- The importance of PHE undertaking horizon scanning to identify new risks and gaps in the knowledge base was emphasised. PHE may wish to expand their research capacity to not only include known diseases but also include horizon scanning to anticipate unknown risks. PHE could play a key role in bringing together the relevant stakeholders to tackle the issues identified.
- The independence of PHE was discussed. PHE stated that they have the same operational independence as the Health Protection Agency. However, there is a critical issue in managing external perceptions. It was suggested that PHE consider commissioning external studies rather than undertaking them in-house when the external perception of independence will likely be a critical issue.
- PHE should continue to participate in global health discussions. Although PHE is not funded to conduct global health research, it has excellence in niche areas, including technical areas such as TB vaccination. It would be advantageous for PHE to continue to develop global health partnerships to strengthen relationships and implement intersectional research.
- PHE will cover reasonable excess treatment costs for public health studies. However, there is no clear basis for agreeing these costs in advance and some studies are attracting very significant costs. It was stated that an external perception that these costs are not covered is deterring research applications to the NIHR Public Health Research Programme and other funders. The potential role of local authorities in covering such costs was discussed.

⁶ <http://www.nihr.ac.uk/research/Pages/HealthProtectionResearchUnits.aspx>

This document reflects the views of participants expressed at the meeting and does not necessarily represent the views of all participants or of the Academy of Medical Sciences. For further information, please contact Dr Richard Malham, Senior Policy Officer (richard.malham@acmedsci.ac.uk, (0)20 3176 2152)

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Annex: Attendees at the Public Health meeting, 28 November 2013

Professor Robert Souhami CBE FMedSci Foreign Secretary, Academy of Medical Sciences and Emeritus Professor of Medicine, University College London (Meeting Chair)

Professor David Heymann CBE FMedSci Chair, Public Health England's Advisory Board and Professor of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine (Session Chair)

Professor Carol Brayne Director, Cambridge Institute of Public Health

Rachel Conner Principal Research Analyst, Health Improvement Analytical Team, Department of Health

Shirley Cramer CBE Chief Executive, Royal Society for Public Health

Professor Adrian Davis OBE Director of Population Health, Public Health England

Professor Brian Ferguson Director of the Knowledge and Intelligence Team (Northern and Yorkshire), Public Health England

Dr Sunjai Gupta Senior Scientific Advisor, Health and Wellbeing, Public Health England

Professor Sir Andrew Haines FMedSci Professor of Public Health and Primary Care, London School of Hygiene and Tropical Medicine

Professor Frank J Kelly Professor of Environmental Health; Director, Analytical & Environmental Sciences Division; Director, Environmental Research Group; Deputy Director, Medical Research Council-PHE Centre for Environment and Health

Mr David Kidney Chief Executive, UK Public Health Register

Dr Antony Morgan Associate Director of Centre for Public Health, National Institute for Health and Care Excellence

Dr Gavin Malloch Programme Manager for Public Health Partnerships, Medical Research Council

Christine McGuire Section Head, Health Improvement Research, R&D Directorate, Department of Health

Professor John Newton Chief Knowledge Officer, Public Health England

Professor Jon Nicholl FMedSci Dean of the School, School of Health and Related Research (SchARR), University of Sheffield and Director, National Institute for Health Research School for Public Health Research (SPHR)

Professor Alan Silman FMedSci Medical Director, Arthritis Research UK

Liliya Skotarenko Public Health Outcomes Framework, Department of Health

Professor Nick Wareham Director, Medical Research Council Epidemiology Unit, University of Cambridge. Grant holder for the Centre for Diet and Activity Research (CEDAR), one of five Centres funded as part of the UKCRC Public Health Research: Centres of Excellence

Dr Ursula Wells Section Head, Health Protection Research, R&D Directorate, Department of Health

Dr Matthew Westmore Director, National Institute for Health Research (NIHR) Evaluation Trials and Studies Coordinating Centre, University of Southampton

Dr James Whitworth FMedSci Head of International Activities, Wellcome Trust

Secretariat

Dr Jennifer Dow, Policy Intern, Academy of Medical Sciences

Dr Richard Malham, Senior Policy Officer, Academy of Medical Sciences

Dr Naho Yamazaki, Head of Policy, Academy of Medical Sciences