

Building the evidence base for public health in England: implications for research and training.

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The work of the Health Development Agency (HDA) and the National Institute for Health and Clinical Excellence (NICE) 2000-2006

Building the evidence base and
developing public health guidance

Health Development Agency 2000-2005

- Acheson Report on health inequalities
- Our Healthier Nation White Paper
- NHS R&D Strategy

The Our Healthier Nation White Paper

- “To improve the health of everyone, particularly the worst off, taking into account, the social, economic and environmental factors affecting health”.

R&D Strategy

- Systematic approach to using scientific evidence in public health
- Provide high quality evidence to reduce inequalities in health
- Knowledge base to be brought together
- Identifying gaps
- Make the evidence base accessible

Rationale for the original HDA evidence base

- To identify the most effective means of improving the the population's health;
- To support the targeting of such work to tackle health inequalities;
- To provide a means of public accountability.

Starting Point

- First stage to synthesise review level work in public health priority areas
- Second stage to bring in other forms of scientific evidence
- Third stage to work towards the synthesis of evidence from different research traditions

- | | |
|---------------------------|-------------------------------|
| • Teenage pregnancy | • Social support in pregnancy |
| • HIV/AIDS | • Physical activity |
| • STIs | • Mental health |
| • Smoking | • Accidental injury |
| • Alcohol | • Health Impact Assessment |
| • Drugs | • Transport |
| • Obesity | • Gradients and gaps |
| • Low birth weight | • Health Impact Assessment |
| • Breastfeeding | • Housing |
| • Housing | • Work and worklessness |
| • Suicide | • Chronic illness |
| • Life course | |
| • Infant nutrition | |
| • Public health economics | |

Products

- Evidence Briefings
- Evidence Reviews
- Systematic Reviews
- Rapid Reviews
- Discussion papers

NICE

The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health.

- Formed 1 April 2005
- Merger of NICE and HDA following the Department of Health's review of Arms Length Bodies

NICE produces guidance in three areas

- **Public health** – guidance on the promotion of good health and the prevention of ill health – for those working in the NHS, local authorities and the wider public and voluntary sector.
- **Health technologies** – guidance on the use of new and existing medicines, treatments and procedures within the NHS.
- **Clinical practice** – guidance on the appropriate treatment and care of people with specific diseases and conditions within the NHS.

- Two types of public health guidance

- **Public health intervention guidance:** recommendations on types of activity usually provided by local health organisations.

- **Public health programme guidance:** broad strategic activities for the promotion of good health and the prevention of ill health. This guidance may focus on a topic (e.g. maternal and child health), a disease cluster (e.g. obesity), or on a particular setting (e.g. schools or workplaces) .

- Effectiveness
- Cost effectiveness
- To do or not to do...and what are the best ways to do it?

Interventions

- Promoting physical activity in primary care
- Smoking cessation in primary care
- Preventing teen conceptions and STIs
- Physical activity in the workplace
- Substance misuse and vulnerable young people
- Mental health and the workplace
- Mental health and older people
- Preventing the uptake of smoking in children
- Alcohol and children in school
- Reducing mortality in highly disadvantaged communities

Programmes

- Maternal and child nutrition
- Smoking cessation services
- Behaviour change
- Physical activity and the environment
- Obesity
- Community engagement
- Physical activity, play and sport in pre school and school aged children
- Health literacy in schools with reference to sex education
- Long term sickness incapacity

Method

- Search for the evidence
- Assess the evidence
- Develop recommendations
- Broad and inclusive definition of evidence
- Variety of methodological approaches and traditions
- Focus on health equity

Process

- Topic Selection
- Scope drafted
- Stakeholder meeting
- Consultation
- Review of the evidence
- Evidence consulted on
- Draft intervention guidance prepared
- Additional evidence
- Fieldwork
- Final consultation
- Publication

Evidence base

- Rapid reviews
- Systematic reviews
- Evidence briefings and reviews
- Technical reports
- Discussion papers

The implications and learning from the two processes for research and training.

Empirically

A very limited evidence base from the research

- Evidence about what works to reduce inequalities very limited
- About 0.4% of published scientific papers discuss interventions which might reduce inequalities
- About the same percentage of funded research concerned with interventions
- Rich in description, weak on solution.
- But it is possible to identify effective interventions.

- Absence of good trials
- Absence of good qualitative data
- Patchy and poor grey literature
- Very limited economic analysis and absence of cost data

- The research doesn't exist
- The research doesn't answer the question
- The research is of poor quality methodologically
- The findings are equivocal

- Formulation of primary research studies reflect the interest of researchers rather than the needs of the public.
- Large gap between researchers and practitioners

Absence of good process data

- How to do it
- How it was done
- Implementation problems
- Local infrastructures data

Theoretical issues

- The precise nature of the causal pathways and the different dimensions of inequality is under-investigated
- The health interaction between different aspects of inequalities not highly developed.

- The ways in which interventions work in different segments of the population not well understood
- The implications of the demographic and social structure not linked to health data

- Better evidence about downstream rather than upstream interventions
- Morbidity data much less secure than mortality data
- Extremely limited evidence about major policy initiatives
- Lack of good cost effectiveness data

- The evidence as a framework of plausible possibilities
- The evidence as a starting point for intervention not an imperative or a recipe
- The need to use multiple methods

Infrastructure issues

- Capacity problems
- Non recognition in the Research Assessment Exercise in Universities
- Concepts in public health economics still very limited

Academic opposition

It can't be done

- Cannot do synthesis and systematic review in public health “because it is irrelevant to public health, that they are only suitable for clinical interventions, that they are reductionist, biomedical, too narrowly focused, and or too complex to provide a useful tool for decision makers...they are nasty brutish and long” (Petticrew & Egan 2006)

Commitments to particular epistemological positions (the Jowett dilemma)

- Epistemological incompatibility
- Scientifically undesirable

“First come I; my name is Jowett.
There’s no knowledge but I know it.
I am master of this college:
What I don’t know isn’t knowledge.”

The Masque of Balliol
Revd. H.C. Beeching

- **Commitments to particular policy options in spite of the evidence (the Mintzberg dilemma).**

Institutional Resistance

- **Prejudice 'I already know the answer'**
- **Lack of fit 'That's not the answer I wanted'**
- **Institutional Inertia 'I'm too busy'**
- **Antipathy 'You used to be HEA!'**
- **Disappointment 'Is that all there is?'**

Visit www.nice.org.uk

The screenshot shows the NHS National Institute for Health and Clinical Excellence (NICE) website homepage. The page features a navigation menu at the top with links for Home, Our guidance, Using guidance, Get involved, News & Events, and About NICE. The main content area is divided into several sections: 'Welcome to the National Institute for Health and Clinical Excellence', 'Using guidance', 'Get involved', 'Latest guidance', 'Latest news', and 'In focus'. The 'Using guidance' section includes links for 'Benefits of implementation', 'NICE implementation progress', 'Implementation tools', 'Tracking guidance implementation', and 'Help implement NICE guidance'. The 'Get involved' section includes links for 'Current consultations', 'Comment on draft NICE guidance', 'NICE is looking for people to contribute to the guidance on preventing sexually transmitted infections and other STIs', 'Hospital site infection consultation', 'Manufacturers - penicillin-resistant *Staphylococcus aureus* (MRSA) consultation', and 'Laparoscopic surgery for the treatment of colorectal cancer: appraisal consultation document'. The 'Latest guidance' section includes links for 'Smoking cessation', 'Physical activity', 'Attention deficit hyperactivity disorder (ADHD)', 'Tuberculosis', and 'See all latest guidance'. The 'Latest news' section includes links for 'NICE launches first public health guidance: focus on smoking cessation and physical activity', 'NICE issues guidance on drug treatments for attention deficit hyperactivity disorder (ADHD)', and 'New NICE guidelines launched for World TB Day to tackle tuberculosis'. The 'In focus' section includes a link for 'NICE guidance on methods to help people quit smoking'. The page also features a search box, a 'Subscribe' button, and a 'RSS' button. The footer includes a copyright notice and a link to the 'Privacy and public involvement' page.