

3 Making a difference: using NICE guidance and embedding evaluation

Michael P Kelly

Director of the Centre for Public Health Excellence,
National Institute of Health and Clinical Excellence (NICE)

Tessa A. Moore

Head of School Improvement at the London Borough of Richmond

Local government has a fundamental role to play in the promotion of health and the prevention of disease. In Britain, public health originated in local government. The history of public health in nineteenth century Britain and the corresponding improvement in the health of the population is closely linked to the history of local government reform and improvement. From the care of the needy and destitute to the provision of clean water and sanitation, local government played a pioneering role (Gairdner, 1862; Frazer, 1947). Indeed the case has often been made that the efforts of local government did more to improve the health of the population than the activities of the medical profession through most of the nineteenth century (McKeown, 1976).

To this day the actions of local government can ameliorate the impact of the wider determinants of health, promote good health and prevent disease. Whether it is housing, education, environment, planning or regulation, the local authority has a contribution to make. The actions of local authorities impact on the everyday lives of ordinary people. The places we live in, work in and relax in are critically regulated, managed, controlled and/or monitored in various ways by local government. Some of the potential hazards that surround us are often critically moderated, or sometimes made worse, by the actions of local authorities, for example dangers linked to alcohol and fast foods. This paper considers how local government can make the best use of the guidance produced by NICE on these and other issues as a way of making a difference to the health of local populations. It also makes the case for local government to do more and better evaluation of interventions.

NICE began its public health work in 2005. It has since produced a range of guidance aimed specifically at various parts of local government. NICE's guidance is also aimed at the NHS but the focus here is what NICE says to local government.

The published portfolio of NICE public health guidance is extensive. It majors on the kinds of public health problems that produce a considerable burden of disease, that show

a strong social class variation, and which are amenable to action designed to prevent, detect and protect from disease. Topics include:

- physical activity
- smoking and tobacco
- sexual health
- alcohol
- drugs
- maternal and child health
- health and work
- older people's health
- cancer
- immunisation
- accidental injury
- obesity
- mental well-being
- cardio vascular disease
- diabetes
- communicable disease prevention.

The NICE public health guidance (see box below) on a range of issues is of particular relevance to local authorities. Also of interest will be the upcoming guidance on child accident prevention, preventing heart disease and diabetes, schools and the prevention of the uptake of smoking, spatial planning, transport policies to promote walking and cycling, looked after children and personal social and health education.

NICE published its guidance on obesity in 2006. It contained a considerable number of evidence-based recommendations about obesity prevention of direct relevance to local authorities. The guidance addressed the ways that schools should be involved in obesity prevention. The recommendations dealt with building layout, recreational spaces, catering, vending machines, physical

education, the curriculum, school travel plans, staff training and the overall healthy schools approach. Of course the guidance acknowledged the considerable degree of independence which schools enjoy from local authorities, but as a framework for Children's Services, as a set of guidance of relevance to the school advisory service, the guidance provided the most up to date and evidence-based assessment of the key ways to tackle obesity in schools. The guidance also dealt with early years settings where it discussed improving levels of physical activity.

The guidance encouraged local government to take responsibility for managing obesity in its own workplaces. This included developing policies and plans relating to healthy eating, physical activity and safe environments, encouraging active travel, promoting and supporting physical activity, promoting healthy foods and developing community-based programmes to help to achieve these ends. The guidance contained advice on working with self help and commercial organisations. Local authorities were encouraged to think about building design, for example making stair use more readily and easily available and by having changing facilities and showers readily available.

To get a flavour of the issues dealt with in the other guidance, see for example the work on community engagement. This details the importance of setting realistic timescales, putting proper funding in place and ensuring proper evaluation is conducted. The guidance majored on issues of power, trust, culture, training and partnership working. The guidance on physical activity and the environment focused on transport, public open spaces, buildings and schools. The guidance on physical activity and young people considered the evidence and made recommendations about active travel, the curriculum, space, facilities and equipment, policies and evaluation. In the guidance on mental well-being and older people, one of the elements considered is how best to get older people physically active by walking and getting involved in walking schemes of various kinds.

One of the very important things the NICE public health guidance does is focus on health inequalities. This can be helpful for local authorities. As this publication demonstrates, the relationship between the wider determinants of health and general patterns of health and health inequalities is very well established (Marmot & Wilkinson, 2006). At a general level the importance of social justice, fairness, basic standards of service, and adequate levels of income can be described quite easily. But the imperative for local government to deliver on the health inequalities agenda and the importance of targeting services effectively requires more than general principles. The NICE guidance builds a detailed consideration of

health inequity into its assessment of the evidence and the recommendations.

This is important because interventions designed to tackle the problem of health inequalities are particularly tricky. In order to maximise the effectiveness of interventions designed to deal with health inequalities several considerations must be borne in mind. Different segments of the population respond in different ways to similar interventions. Therefore the whole health gradient, not just the most disadvantaged, needs to be factored into the intervention. To maximise health improvement we need the health of the population as a whole to improve, but the health of the most disadvantaged to improve at a more rapid rate (Graham & Kelly, 2004). To do this requires a good understanding of the nature of the different segments in the population and their different needs. This is where the NICE guidance can provide useful frameworks for action.

NICE guidance on public health

Guidance aimed at various parts of local government: <http://guidance.nice.org.uk/PHG/Published>

Forthcoming guidance on child accident prevention, preventing health disease and diabetes, schools and the prevention of smoking uptake, spatial planning, transport policies to promote walking and cycling, looked after children and personal social and health education: www.nice.org.uk/Guidance/PHG/InDevelopment

Prevention, identification, assessment and management of overweight and obesity in adults and children: <http://guidance.nice.org.uk/CG43>

Community engagement: <http://guidance.nice.org.uk/PH9>

Physical activity and the environment: <http://guidance.nice.org.uk/PH8>

Physical activity and young people: <http://guidance.nice.org.uk/PH17>

Mental well-being and older people: <http://guidance.nice.org.uk/PH16>

Methods for development of NICE public health guidance: www.nice.org.uk/media/FB9/59/PHMethodsManual2006.pdf

The way in which public health guidance is produced is by searching for and synthesising all the evidence relating to a particular issue. The evidence is assessed to determine its quality. Then, independent advisory committees use the

evidence to craft recommendations. Assessing the evidence in this way disentangles the things that improve the health of the population and things which determine inequalities in health.

As NICE has produced public health guidance there have been several challenges. Most obviously local government and education have not traditionally looked to NICE to provide this kind of advice and guidance. But more fundamentally the nature of the evidence relating to these issues is much more complex than that relating to medical interventions. It is sometimes argued that determining the effectiveness of interventions in education, social care or even environmental health is impossible. This is because the kind of evidence that is thought to be needed, especially randomised controlled trials, cannot be undertaken. Therefore it is alleged there is not an evidence base that can be turned to with confidence.

This argument is wrong on several counts. First, NICE takes a broad approach to evidence relating to public health and does not confine itself to data derived from trials. It considers the best available evidence. Second, although the systems of local delivery are complex, and the ways the wider determinants of health operate are complicated, that does not mean that it is impossible to make evidence-based recommendations. The NICE public health guidance has identified many actions at local, community, individual and national level which, if implemented properly, would lead to health improvement and to reductions in health inequalities. Of course, more and better evidence would make the task easier, but there is still a great deal that can be taken from the evidence as it currently stands.

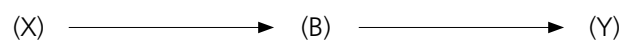
To produce better evidence, a number of actions by teams on the ground would help enormously and here local government has a potentially very important role to play. Local authorities must think very seriously about evaluation and contributing to the evidence base in a way that will make it possible to do better and more effective interventions.

There are a number of important principles for evaluation. All interventions should be evaluated routinely (NICE 2007). An evaluation is not some afterthought tacked onto the end of an intervention. It is an integral part of the intervention. It is not really ethical to plan an intervention without including proper evaluation at the same time. Wherever possible when an intervention is implemented, comparisons with other groups or areas not receiving the interventions should be made. For example, in the project on a Greenwich housing estate described in the box below, 'Feeling good about where we live', comparisons will be made between the estate on which the interventions take

place and another estate on which no interventions are planned. When it is not possible to collect comparative information it is still very helpful to collect data before and after the intervention. It really is not much use to collect information when the intervention is all over or is half way through.

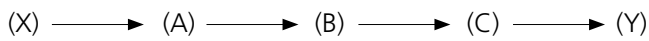
Another very important part of local evaluation is to describe as far as possible the evidence relating to linkages along the pathway from the intervention to the outcome. When an intervention is planned and implemented, there should be a clear and explicit model in the minds of the planners about why they have reason to believe that the intervention will work. There will be a theory about the ways in which the different elements in the programme connect with each other. In the Greenwich example described below the theory is that various improvements to the environment within the estate and to the homes on the estate will assist in improving the mental health of those who live there. This should be made explicit and should be used to guide evaluation (NICE 2007). The idea behind this is called 'realistic evaluation'. Realistic evaluation seeks to determine for whom an intervention works and in what circumstances (Pawson, 2001; 2006). The focus in a realistic approach is on the programme mechanisms, that is, on each part in a causal chain, in order to provide a better chance of addressing these as they occur. The following diagrammatic representations illustrate the point.

Let us assume that we introduce free entrance to gyms run by the council. Let's call that X. The idea behind this is that some change in behaviour (B) will follow from X and will lead to the outcome Y which is greater gym use.

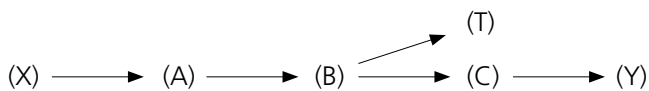


The realistic approach would start not by trying to measure the impact of X on Y by for example using a questionnaire or counting the number of people attending the gym, but would break down the all the links in the causal chain from X to Y and consider how they might work. Similarly, in the Greenwich example in the box below, the realistic approach would not initially attempt to measure directly the overall impact of interventions on the mental health of residents, but would look at any changes following the 13 different interventions proposed.

Thus:



So in simplified form changing the entrance charge (X) is based on the theory that the price determines people's behaviour. No doubt it does, but so too does the amount of time they have to go to the gym, whether they like the thought of doing exercise, whether they believe exercise will do them any good, whether the gym is in a convenient location and so on. So A in the diagram is the complex of factors which will determine the degree to which the reduction in price will lead to a change in behaviour. And of course even if the change in behaviour does take place, C in the diagram represents all those factors which will determine whether the behaviour is maintained and becomes a habit. The road to the gym is paved with many good intentions and there are all sorts of other outcomes that may arise. So in the next diagram, T is the outcome for the person who goes out and buys a new set of gym clothes and trainers but never wears them to go to the gym and never actually does any exercise.



The principle is simple, but what an evaluation must do is describe very clearly what these different steps are, seek to be clear about the reasons why the steps along the pathway may get interrupted and try to evaluate the outcome using as much information about these steps as is possible. In the Greenwich example, using the estate where no interventions are planned as a control enables the project initiators to see whether the changes might have happened anyway, even without the interventions.

This sort of information is absolutely vital in order to develop and improve the evidence base and so do better interventions. Some of this sort of information is readily available and NICE makes good use of it. But more of this would provide an even better basis on which to proceed. Local government is ideally placed to collect it.

Making a difference to health inequalities and improving population health can be done on the basis of evidence. Much can be done now and the implementation of NICE public health guidance is one important way that local authorities can do this. But looking further into the future, more and better data collected by local authorities would undoubtedly be hugely beneficial.

Feeling good about where we live: what can a local council contribute?

'Feeling Good About Where We Live' is an initiative by the London Borough of Greenwich. It focuses on improving people's environment and living space with the aim of improved mental health among residents.

This three-year project, developed by Greenwich Council and PCT, focuses on two estates in deprived areas of Greenwich. One is a control where no interventions will take place. Both are in the bottom 10 per cent of the index of multiple deprivation. The first half of the project – 18 months – will involve consulting residents and implementing changes. People will then be questioned six and 18 months later about the changes. After that the project will assess any improvements to residents' mental health.

The project has six main themes:

- home comfort
- peace and quiet
- room to move
- feeling safe
- what's on
- liking where you live.

It also has a set of 13 related factors in the physical environment that can be used as predictors of poor mental health.

For the past two years, Greenwich PCT has funded the engineering and consultancy firm Arup to explore what small-scale physical and social interventions might make a difference. For example, there is evidence that wildflower planting can help people to enjoy their immediate surroundings more. This is one of 13 factors identified by the project.

Other interventions may focus on specific dwellings, for example, installing bunk or desk spaces in bedrooms so that young people have a space to study at home. There will also be interventions designed to get people together, such as events on the estate, to help meet some of the social aims of the project.

Significantly, the project intends to work within mainstream budgets and adjust them where necessary. The department of neighbourhood services at Greenwich Council is keen to test different uses of mainstream resources to see if this makes a difference to people's sense of well-being.

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