Public health in hospitals: new steps in old directions

John Wright, Philip Ayres and Peter Hill

Abstract

A pilot scheme of hospital epidemiologists in the Northern and Yorkshire region has provided an exciting opportunity to promote a public health perspective among hospital clinicians. Responsibilities and roles of the posts include the promotion of clinical effectiveness and evidence-based practice, epidemiological support for audit, research and clinical evaluation, liaison with primary care and public health colleagues in health authorities, and the development and implementation of clinical guidelines. Although the posts are not restricted to public health specialists, public health training and skills provide an excellent foundation from which to meet the challenges that arise from the posts. We discuss some of the lessons learnt by two public health doctors from the early steps in this new direction.

Keywords: effectiveness, evidence gathering, clinical audit, professional education, evaluation

Introduction

Public health doctors have a range of specialist skills which have enabled them to pursue a variety of career paths. However, in the United Kingdom the majority of specialists are employed by health authorities or in academic departments of public health. Following the National Health Service (NHS) reforms in 1990 and the subsequent assumption of the purchasing role, public health departments have concentrated on influencing purchasing policy to achieve better public health. Their influence in provider Trusts has often been compromised by restricted access and poor relationships. Potential conflict arises from the suspicion by clinicians of the ‘other side’ and, more fundamentally, from differences in the responsibilities for individual and population health between clinician and public health physician.

With the increasing emphasis on evaluation of health services and promotion of clinical effectiveness there has been the recognition that many NHS Trusts do not have the specialist skills in-house to address these issues fully. Individuals working in Trusts who do have such responsibility and expertise often have heavy clinical or managerial workloads, and advice from outside tends to focus on individual projects rather than long-term strategies.

In 1994 the Northern and Yorkshire Regional Health Authority agreed to support the establishment of a pilot scheme of six medical care epidemiology posts on an initial three-year contract at consultant level. The first two years would be funded by the Regional Health Authority and the third by the Trust. Almost half the NHS Trusts in the region submitted bids for these pilot posts. Selection was made on the basis of the quality of bids against set criteria and appointments were made during 1995. Commitment at the highest level was assured by making the posts accountable to the chief executive or other executive director, such as the medical director. The chief executives themselves were made accountable for the successful achievement of the objectives of the scheme through the performance review process.

These posts offered an exciting opportunity to promote the skills of public health physicians in hospital health care and encourage the adoption of a public health perspective among hospital clinicians. Two of the successful applicants were accredited in public health medicine and were appointed as consultants. This paper describes the role and advantages of the posts, the barriers to success and the lessons learnt so far from these two postholders.

Responsibilities and roles

The posts offer a great opportunity for putting public health skills into the clinical practice setting. The remit has been broad (Table 1) in view of the newness of the posts and the variation in priorities between different settings, but specific roles have included the following:

Promoting clinical effectiveness – the educator

Much of the work on clinical effectiveness has concentrated on secondary care and it is therefore appropriate that Trusts rise to

Bradford Royal Infirmary, Duckworth Lane, Bradford BD9 6RJ.
John Wright, Consultant in Epidemiology and Public Health Medicine
St James NHS Trust, Beckett Street, Leeds LS9 7TF.
Philip Ayres, Consultant in Epidemiology and Public Health Medicine
John Snow House, Durham University Science Park, Durham DH1 3YG.
Peter Hill, Deputy Regional Director of Public Health, NHSE Northern and Yorkshire, and Honorary Lecturer, Department of Epidemiology and Public Health, University of Newcastle upon Tyne
Address correspondence to Dr J. Wright.

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Table 1 Examples from the responsibilities and roles of hospital-based epidemiologists

<table>
<thead>
<tr>
<th>Promoting clinical effectiveness</th>
<th>Providing strategic support for clinical development</th>
<th>Providing epidemiological support</th>
<th>Facilitating the use of clinical guidelines</th>
<th>Promoting collaboration and co-operation</th>
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<tr>
<td>Education</td>
<td>Establishment of the Effective Practice Unit, in place of the audit department, to systematically introduce evidence-based practice</td>
<td>R&amp;D training for study design and medical statistics</td>
<td>Establishment of guideline database</td>
<td>District Clinical Effectiveness Group with senior representatives from purchaser and provider organizations</td>
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<td>Postgraduate lectures</td>
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<td>Setting up of n of 1 trial service (e.g. amitriptyline in pain relief; long-acting B-agonists in asthma)</td>
<td>Education and appraisal sessions on good guideline development</td>
<td>Pathfinder project – developing primary-secondary care compendium of clinical guidelines</td>
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<td>Clinical effectiveness workshops</td>
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<td>Introduction of standard routine health outcomes with EQSD and UKQIP</td>
<td>Development of evidence-based guidelines for:</td>
<td>King’s Fund PACE, H. pylori project – implementing evidence-based guidelines in primary and secondary care</td>
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<td>Board presentations – Health authorities and trusts</td>
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<td>Monitoring of angiography patients using Duke scores</td>
<td>Acute stroke management</td>
<td>Development of a home-based treatment service for deep vein thrombosis</td>
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<td>Critical appraisal sessions.</td>
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<td>Systematic reviews of importance of obesity in day care surgery</td>
<td>Dyspepsia and endoscopy</td>
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<td>(1) General, multidisciplinary</td>
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<td>Evaluation of lower limb orthopaedic replacement service</td>
<td>Investigation of DVT/PE</td>
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<td>(2) Specialty and topic specific</td>
<td></td>
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<td>Local implementation of Royal College of Radiologists guidelines in A&amp;E</td>
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<td>Information</td>
<td>Establishment of the Clinical Effectiveness Group, combining Medical Director, heads of audit, R&amp;D, postgraduate and undergraduate education, nursing, therapy and senior managers.</td>
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<td>Epilepsy</td>
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<td>Networking of Medicine and the Cochrane Library to wards and out-patient departments</td>
<td>Introduction of a monthly newsletter, Search (Supporting Education, Audit, Research and Clinical effectiveness in Health)</td>
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<td>Sleep apnoea</td>
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the challenges of encouraging evidence-based health care. Hospitals need to ensure that they have a common, multidisciplinary focus for ensuring that the delivery of patient care is appropriate, continuously evaluated and proven to be effective.1

The aim is to produce a high quality of patient care, but wider advantages lie in the promotion of the Trust to local purchasers (both health authorities and fundholders), in risk management by ensuring the acceptance of effective clinical practices, and in attracting high-calibre clinical staff to an organization that can demonstrate its commitment to clinical development.

The first step in encouraging evidence-based health care is to demonstrate the reasons behind it and the advantages to investing in it.2 Understanding by clinicians about the basis and implications of evidence-based health care is often limited.3 Educational initiatives to inform and explain are an important part of developing clinical effectiveness.4 Individual and departmental educational needs were identified and strategies implemented to meet them through training in how best to search for evidence, critically appraise it and then apply and evaluate it.5 Generic critical appraisal workshops are one model that was used to generate initial interest and stimulate cultural change in the organization. Specialty specific workshops allowed more real-life examples to be addressed and demonstrated the practical value of evidence-based health care.

For clinical practice to be based on research evidence, there has to be accessible and reliable information available to clinicians. This involved the co-ordination of the collection and dissemination of rigorous reviews [the Cochrane database and Database of Abstracts of Reviews on Effectiveness (DARE) currently available on the Cochrane Library] and summaries of research trials (American College of Physicians Journal Club and Evidence Based Medicine publications).

Ideally, such information should be networked to wherever clinical decisions are being made. Providing networked access of this information created a valuable opportunity to incorporate clinically useful information on hospital computer systems, which are typically dominated by contracting information.

Providing strategic support for clinical development — the honest broker

Promoting clinical effectiveness provided an excellent opportunity to pursue a cohesive strategy which united audit, education, and research and development in Trusts. Involvement of managers and policy-makers is an important component of such a strategy if clinical effectiveness is to be translated into health policy.6 Such integration lays a common foundation for the delivery of knowledge-based, clinically effective patient care which can be continuously evaluated. It also provides a fresh stimulus to clinical audit which has become too tired,7 education which is wanted when it is not needed,8 and Research and Development, which is becoming increasingly important and yet is poorly understood. The essential component of such a strategy is senior management support to ensure that it has an impact in the Trust and devolvement of responsibility to individual clinical departments to ensure sustainable development. This ownership has been encouraged by establishing lead clinicians in different divisions to co-ordinate a supportive, multidisciplinary approach to clinical effectiveness. In some cases this has been the previous audit lead, but more frequently it has been the clinical head of service.

Providing epidemiological support — the expert

Epidemiological expertise to support high-quality audit and research projects has been a welcome addition for most clinicians. There is general recognition of the rising standards required from peer review bodies, and a desire to ensure that good epidemiological and biostatistical advice is available from an early stage of project design.

Encouraging a culture of evaluation among hospital clinicians is essential in a health service which is changing rapidly and having to cope with frequent medical advances and new therapies.9,10 As part of such encouragement of evaluation there is also an important role for promoting the greater use of clinical outcome measures in routine clinical practice.11

Promoting collaboration and co-operation — the liaison worker

The posts provide an excellent link between secondary care, primary care and health authorities. Such links have increased the potential for improving the health of communities through collaboration and co-operation in assessing local health needs, controlling communicable disease, promoting preventive medicine in hospital settings and planning health services for the future.

The training of public health doctors gives them a broad understanding of the important influences on health status and the impact of medical interventions on the health of the population. The chance to work closely and strategically with hospital clinicians has been an opportunity to inform them about these influences and about how the health of the population relates to their own practice with the health of the individual.

Increasing the use of clinical guidelines — the facilitator

The potential benefit of clinical guidelines is well recognized.12,13 The majority of clinical guidelines originate in secondary care from clinicians, who frequently lack the time or skills to ensure that they are used beyond their own department. The posts have provided a good opportunity to facilitate the development and implementation of rigorously produced guidelines across the primary–secondary interface.

Skills

Although the skills needed to undertake these roles and responsibilities are not unique, they are exemplified in public health physicians. Public health training has provided the two
postholders with a solid grounding in epidemiology, statistics, health needs assessment and management with which to meet the challenges of such posts. One of the postholders has a background of hospital medicine and one as a general practitioner. This clinical experience has provided a valuable background to gain professional acceptance and integration within different disciplines.

The educational components to the job are important, and teaching and facilitation skills are crucial. Both postholders have previous teaching experience from attachments in academic public health departments and this has been built on. A high degree of flexibility is essential for a job which will vary considerably between tasks and over time. Perseverance is also a useful attribute when attempting to enthuse and inspire clinicians, who often have little idea what the post is about or how it relates to them. Management of change is an integral part of all development of a new post in a new field.

**Barriers**

Barriers arise from the limitations in time and financial resources. With ever-increasing clinical commitments, many clinicians, although supportive, would rather that they could devolve responsibility for clinical effectiveness and evaluation to a third party, in this case the postholder. Such devolution would be counter to the whole basis of clinical effectiveness and evaluation, and prevent sustainable professional development in these areas. Success should be viewed through the achievements of others, and strategies to encourage individual ownership and responsibility include the incorporation of clinical effectiveness into time already set aside for continuing medical education and clinical audit. The network of clinical leads, for clinical effectiveness, supported by the postholders, provides a practical structure to achieve this goal. One example of how efforts to practice evidence-based medicine can be supported within the limitations of time is by using summaries of evidence prepared by others, or evidence-based guidelines.

Potential barriers also come from the expectations of others. Clear objectives and strategies will anticipate what results can be expected and a realistic timetable for change.

Lack of money is frequently cited as a barrier and yet financial support is essential to develop the necessary databases and the networked access of this information throughout the hospital. The costs of developing such networked access are marginal in comparison with the costs of collecting and collating routine hospital information, and the availability of clinically useful information provides a welcome balance to the predominance of contracting activity on current hospital information systems.

**Advantages and disadvantages**

The advantages to the posts stem from their position and perceived independence from health authorities. The opportunity to work closely and ‘on the same side’ as clinicians has been met with much enthusiasm from most Trust staff. There has been a general sense of welcome to a post which is seen as a chance to wield greater influence with the purchaser and take the initiative in new developments that the health authorities usually lead.

Perhaps the main disadvantage of such new posts at present is the poor understanding of the role of the postholder by clinicians and managers. Although reactions are generally positive there has been considerable uncertainty about the objectives and proposed methods of the postholders. Some of this uncertainty is due to defensiveness from the perception of a potential threat, and care needs to be taken to be explicit about what the objectives and the strategies for achieving these are.

**Key lessons learnt**

A thorough induction programme helped to speed the acceptance of the postholder. However, a month of enthusiastically received introductions and explanations could be followed by a month of sitting waiting for the initial enthusiasm to end up outside your door if care is not taken to follow up initial suggestions with concrete proposals. Increasingly heavy clinical commitments mean that few clinicians have the time to take the initiative.

To demonstrate the benefit of such novel posts within Trusts, initial efforts were directed at picking winners. Projects with realistic, short-term timetables, clarity of purpose, involvement of clinical opinion leaders and explicit benefits and outcomes are pursued. The nature of such projects will depend on local priorities and circumstances. An evidence-based approach to changing professional practice can be supported by translating what is known to be effective from the reviews of the Cochrane Collaboration on Effective Professional Practice.\(^6\),\(^7\)

At the same time as individual projects were being pursued, early efforts were made to develop longer-term strategies. Opportunities to lecture and explain were seized as valuable methods to promote the role of the job and dispel any uncertainty and defensiveness.

Close links to nurses, therapists and other health professionals allied to medicine are just as important as developing links with consultant medical staff. Interest in clinical effectiveness is often greatest in these professional groups. Junior medical staff also provided an increasingly receptive audience, for reasons of training and appraisal, the implementation of clinical guidelines, or for the pursuit of good research projects. Undergraduate medical students are also an important target group.

The novelty of the posts creates problems around where they fit into Trust organizations. Although the posts are non-clinical, it is important that they are viewed by clinicians as effective in both the management and clinical arenas. At the same time, it is essential that they are fully engaged in the planning and policy structures of the organization. One disadvantage of falling between the two stools of management and clinical departments...
is the danger of becoming professionally isolated. Close liaison and networking with public health colleagues in health authorities and other postholders can help to avoid such isolation. However, care needs to be taken to ensure that this liaison does not undermine trust in the postholder from hospital clinicians and managers.

The key role of the Northern and Yorkshire posts is to promote clinical effectiveness; it is therefore appropriate that some form of assessment be undertaken to demonstrate the effectiveness of such new positions, and a formal evaluation is currently being established. Such an evaluation will provide the rare opportunity in the health service of demonstrating an evidence base for new professional and employment developments. In the mean time, the potential of these new posts and their enthusiastic reception in hospitals provide great encouragement for a rediscovered public health role.

References


Accepted on 2 July 1997