There are four major themes for implementing the strategy. Firstly, a programme of education for audit, both formal and informal, will be available throughout Wales. Secondly, two audit facilitators, one based in Bangor and one in Swansea, will be appointed to support the training programme and provide practical help, guidance, and support for nurses developing audit and to complement that given by the audit adviser and coordinator. Thirdly, audit development sites, where audit techniques can be refined and developed and used as demonstration areas for the rest of Wales, are to be set up. The five sites are at Gwynedd Hospital, Bangor, for work to improve discharge arrangements for elderly medical and surgical inpatients; at Wrexham Maclor Hospital, Clwyd, for work in a multidisciplinary audit of rehabilitation of patients with stroke; at Rhondda Health Unit, Mid-Glamorgan, for developing Wilson’s model of quality assurance for hospital and community settings; and at Gwent Family Health Services Authority, for developing audit of the practice nurse service.

Finally, growing out of these activities a network and communication system will be developed, whose aim is to put nurses in touch with others with similar audit interests and to help to disseminate information. The network will also link into existing networks such as the Royal College of Nursing’s quality assurance network (QUAN) and the King’s Fund nursing audit database to encourage nurses to share their ideas more widely.

Guest speaker Professor Alison Kitson, director of the Institute of Nursing in Oxford, discussed factors influencing the implementation of audit. From her research findings on nurses’ contribution to pain relief in surgical patients and the relations between stages of the quality assurance or audit process and the patient’s experience she told delegates how communication and education are essential to implementing audit.

Professor Christopher Maggs, RNJ professor of nursing research at the University of Wales College of Medicine, welcomed the strategy’s emphasis on communication and further emphasised the need for nurses to have time to talk to each other about developments in their practice. He saw audit as a mechanism for making accountability operational and that it must be seen as a part of a much bigger professional picture, not an end in itself.

The conference ended with the announcement of further available grants to help with smaller projects.

**Medical audit and medical research. Joint conference organised by Northern Regional Health Authority and the University of Newcastle upon Tyne, Newcastle upon Tyne, September 1992.**

A lot of energy, time, and money is being spent on the independent national initiatives for medical audit and medical research. The purpose of this conference was to stimulate debate about benefits of these initiatives by actively addressing the key questions about audit and research. The conference was well placed to explore links between audit and research and to discuss approaches for evaluating the effectiveness of audit and for auditing or evaluating research programmes as the speakers included the national director of research and development, senior health service researchers, academic clinicians, the editor of the BMJ, and researchers with experience in evaluating the implementation of audit.

How do audit and research differ? There was a reluctance to demarcate audit and research. The boundary between audit and research was considered to be quite fluid and thus unnecessary. But clear and agreed fundamental differences emerged. Research aims at extending knowledge whereas the function of audit is to promote the proper and efficient application of the research findings. Research seeks out generalisable truths and audit discovers whether these truths are applied locally. Research controls and, when possible, fixes the environment to make measurement easier but audit measures a natural and often changing environment. Research continues until the question is satisfactorily answered but questions answered once through audit will have to be asked, and answered, again, to achieve continuous quality improvement in patient care.

Audit and research were clearly perceived as complementary activities. Cooperation between them, not competition, is necessary. But medical audit is not yet on the national research and development agenda.

How are audit and research similar? Audit and research are both problem-solving activities and require rigorous methods to achieve results. Both are concerned with understanding cause and effect and both need reliable and valid data. Both involve a critical evaluation, which provides a key for analysis. Audit and research depend on a high degree of professional involvement. Neither works well if externally directed but both need managing in a cooperative style. Both have the same ultimate objective – that is, better quality medical care. This includes evaluation of care and early and effective diffusion of knowledge. Adequate professional and financial resources with appropriate support and encouragement are necessary for both audit and research. As the national research strategy is focusing more on problems, rather than hypotheses, a close relationship between audit and research will be crucial.

How do audit and research interrelate? If research is about discovering the right thing to do and audit about whether the right thing is being done and is achieving expected results, then the correlation between research and audit is clear. Audit should automatically follow the implementation of research. The results of audit are important to researchers as well as to practitioners because audit demonstrates the gaps and informs the focus in current knowledge and thus can stimulate research.

The quality of research is an important issue. The problems of assessing research are similar to those of assessing medical practice. Currently, appraisals of research quality are more concerned with qualitative peer review and measures such as citation numbers and “impact factors” of journals. The available measures are retrospective, but “foresight” indicators are needed to predict good research. Is audit and research experience sufficient to conclude that audit projects are often effective and achieve their goals, though the effect may be transient. Furthermore, guidelines, especially when internally devised, do change practice.

The synergy of objectives is the hallmark for the evaluation of audit. But the objectives of funding bodies may differ from local objectives, and they may also vary between local units. The essential questions that need urgent answers are: is routine audit, as opposed to audit by enthusiasts, effective; is audit cost-effective; and is audit effective at an organisational as well as a project level?

Some approaches and methods for answering these questions were outlined. One presentation demonstrated that the cost-effectiveness of an audit to assess the use of thrombolytic therapy for myocardial infarction in five hospitals depended on the degree of change, which was least in the hospital which already had high standards of care. The more effective the audit, as was argued, requires its integration into the science cycle, which, put simply, would entail summarising knowledge, devising standards, devising methods, calculating sample size, undertaking the audit with valid and reliable data collection methods, feedback of results using easily assimilated graphs, workshops to agree changes, and then working round the cycle again. But one major problem is how to change professional behaviour, sometimes a difficult process even in the face of compelling information. Research and audit may need to find opinion leaders to stimulate and support change.

What is the future of audit and research? Research and audit will be increasingly and closely scrutinised to prove their worth and to assess how they can be made more effective, especially in a worsening financial environment. Research will be audited and audit research. Without an approach for evaluating audit was proposed and this included an appropriate emphasis on qualitative methods.

Among the recognised threats to audit were that, as with peer review methods in...
research, audit would be perceived as anti-innovatory; it would be seen as simply providing a source of funds and structure for "bad" research or its results would be erroneously generalised. An optimistic view was that audit would reveal such wide gaps in knowledge that the importance of research would be acknowledged even by sceptics. The challenge would then be to empower practitioners with the skills and research support to fill these gaps.

Audit, like research, is much more likely to be successful within a trusting, communicative, multidisciplinary atmosphere. Furthermore, several delegates foresaw audit as an activity within a framework of health care purchasing in the context of health care improvement and not as an isolated activity. Audit is participative. On the evidence of the conference there is plenty of scope for research and development in medical audit. Time, however, is a key factor if major programmes for change, such as the national medical audit initiative, are to achieve their objectives.

Finally, the conference agreed that the consumers' views in helping to develop, maintain, and evaluate audit have been insufficiently appreciated.

RAJ BHOPAL
Professor of Epidemiology and Public Health
RICHARD THOMPSON
Senior Lecturer and Consultant in Public Health

(For the conference organising committee, which also included Mr A Barton, Dr Ennis, and Dr C Holland)

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**DIARY**

14-15 January
Leeds: Nuffield Institute for Health Services Studies. Audit in practice (Training for audit officers: workshop No 2). A follow up workshop for those who attended the introductory workshops or who are actively engaged in medical audit to review issues and problems; to share information and ideas, particularly about audit design and outcome; and to identify action and development as necessary. (£375 residential, £350 non-residential.) Further details from Sally Sugden, Nuffield Institute for Health Services Studies, 71-75 Clarendon Road, Leeds LS2 9PL (tel 0532 459034; fax 0532 460899).

1 February
London: King's Fund Centre. Audit and service development. A national conference to launch the King's Fund publication on audit and service development by Charlotte Humphrey and Jane Hughes. Further details from Sue Lloyd-Evlyn, King's Fund Centre, 126 Albert Street, London NW1 7NF (tel 071 267 6111 ext 212; fax 071 267 6108).

9-11 February
Leeds: Nuffield Institute for Health Services Studies. Coming to grips with QA. A workshop for those with professional and managerial interest in, or responsibility for, quality assurance, whether as purchasers or providers, to explain quality assurance and how to develop strategies for implementing it. (£440 excluding accommodation.) Further details from Sally Sugden (see above).

January–March 1993
Leeds: Nuffield Institute for Health Services Studies. Tackling audit. A series of one day workshops for chiropodists, radiographers, physiotherapists, occupational therapists, psychiatrists, clinical psychologists, community psychiatric nurses, and psychiatric nurses which are designed for those who wish to begin conducting clinical audits of patient care or who want to increase their basic knowledge. (£300.) Further details from Sally Sugden (see above).

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**QUALITY QUOTES**

"Come give us a taste of your quality." — SHAKESPEARE, Hamlet, II ii

"Questioning is not the mode of conversation among gentlemen" — SAMUEL JOHNSON, 1776

"Quality isn't something you lay on top of subjects and objects like tinsel on a Christmas tree. Real quality must be the source of the subjects and objects, the cone from which the tree must start" — PIERSIG, Zen and the Art of Motorcycle Maintenance, 1990

"A person who sees quality and feels about it as he works is a person who cares. A person who cares about what he sees and does is a person who's bound to have some characteristic of quality" — PIERSIG, Zen and the Art of Motorcycle Maintenance, 1990

"Quality isn't a process — it's a state of mind" — DAVID YOUNG, Managing Director, Kineticon, 1990

"Just because it came with a letter saying 'it's non-recurring' doesn't mean it's not coming again next year. I don't know why people find this confusing" — CIVIL SERVANT, discussing monies for medical audit

"Sweets, drinks, videos..."