following criterion: 8% complete audit, 7% full audit, 31% partial audit, 13% potential audit, 15% planned audit, and 22% planning audit. At that time 4% were performing audits, but this has subsequently been reduced to 0%.

Our two new categories are compatible with the system described by Derry et al and we hope they will prove useful to others. We agree that the usefulness of this systematic coding system will be to provide information on the progress of audit in the county and to identify those practices in need of help in pursuing their audits. We use the coding method to help us to focus our activities more effectively in facilitating the development of medical audit in Wiltshire and not in a point scoring or punitive fashion.

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BOOK REVIEWS

Measurement in Neurological Rehabilitation. Derek T Wade (pp 408, £50, 729 pp of Observer measures) and a compactness and metaphor, some scales are almost chronic in their compactness and attention to detail, while others give an anglo-saxon-like span of the subject. Knowing which use can be the biggest problem of all.

Derek Wade's new book is an answer to our prayers. Not only does it act as a reference guide to the complete set of tools used in audit, but it also gives specific advice on the choice and use of different measures. Many will be familiar with the difficulties, having read a research article, of discovering that one of the outcome measures being used is not readily available and proves, when it does arrive, to be in Swedish. Validation, if undertaken at all, has usually been published in a subsequent issue, etc. The fourth section of this heavy sent book gives full details of over 100 measures accompanied by the author's comment on the characteristics (reliability, validity, etc) of the scale.

In a book which attempts to outline the available choices in an unbiased fashion one might expect to be left with yet another wealth of information and little clear guidance. But not so. In chapter 12, the author lays out very clearly his own choice of measurements and the specific circumstances of his two units (one an acute rehabilitation centre, the other a young disabled unit), always with his eye on economy and relevance. The book will be invaluable for anyone involved in service provision, audit, evaluation, research, or planning future services for patients with neurological disability.

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In the 1970s audit was a term that was used rarely in medical parlance in the United Kingdom. In 1980, however, the "BMJ brought audit to the attention of many in the medical profession by publishing a series of five introductory articles by Charles Shaw. Drawing mainly on his own experience and knowledge of quality assurance in the United States, Shaw summarised the key principles of audit and, incredibly, in two short papers was able to document the activity in hospitals and general practice in Britain. His paper on the acceptability of audit was written against a general background of decided lack of enthusiasm and suspicion of audit among doctors.

When writing "Looking forward to audit", Shaw probably did not realise that he would have to wait almost 10 years before the vast majority of doctors and nurses were convinced of the benefits of audit. In the mid-1980s there were isolated pockets of activity among several groups – for example, the Royal College of Radiologists' multicity audit of the use of routine diagnostic procedures, the Lothian surgical audit of mortality and complications after surgery, the Royal College of General Practitioners' practice activity analysis, and the Confidential Enquiry into Maternal Deaths. Much good work was carried out, methods were explored, and a small cadre of individuals became experts at the dos and don'ts of audit, while publishing sporadically in the general and specialist medical journals.

After publication of the government's white paper Working for Patients in 1989 the scene, alphabetically, was BMJ responded to the fervour by including a special section on medical audit. In this section articles were published dealing with many aspects of audits, and the authors of these thorough and detailed papers, such as Shaw's early papers, are now brought together in Audit in Action. In 30 chapters, surgeons, physicians, specialists in public health medicine, audit officers, sociologists, and others, mainly from the United Kingdom, provide a rich insight into audit.

An appropriate organisational framework is often the key to success in audit, and this is addressed in an early section of the book. What is the role of regional specialty subcommittees? How should an individual clinician get started? What should audit officers do? In the following chapter on "Wearing one's hat" all the methodological issues are addressed – for example, techniques of reviewing medical records and surveying patient satisfaction. Here the book emphasises two important aspects: first, how audits should be set up and monitored; and second, how the emphasis of audit from simply collecting data to making improvements in the quality of care. Clinicians wishing to do this would be advised to concentrate on their local chapter on criteria based audit and use Bhopal and Thomson's form, described in a later chapter, as a means of educating themselves about audit when reading papers.

The final two chapters on total quality management, by Berwick, Enthoven, and Bunker from the United States, take us forward from the narrow confines of medical audit the other side of the industry that striving for improved quality, not just maintaining the status quo, should pervade every aspect of the organisation and be an ideal that is incorporated into everyday practice. One philosophy is not quite with us in the NHS but Audit in Action, as well as providing some useful insights into audit, may help to move us in that direction.


Hugh Koch's excellent book goes much further than the usual basic text on quality, which is often "soft" in its approach and leaves people wondering: "That's all very well, but . . . ." It comes much more from his consultancy work and so is grounded in practice and refreshingly aware of all the connections between total quality management.
Rachael Rossier on global health care outcome measures. It is therefore reasonable to expect this book to present the reader with a state of the art discussion of medical informatics with a particular emphasis on the needs of the practising doctor but set in the wider context of health care. The only hint of warning is contained, unfortunately, on the fly sheet. Here it states that the book is a report for managers and clinicians.

Hospital information systems, resource management systems, DEMIX systems, and other systems have been primarily developed from the perspective of administration. Systems that are of particular value for doctors in their clinical work have been developed by computer enthusiasts and, unfortunately, have not been commonly accepted. This partly reflects the difficulty of the subject of medicine and partly the fact that the medical profession has been slow in realising the need for investment of time, energy, and money and, more particularly, in establishing liaisons with departments of medical informatics, or operational research, to enable clinical systems to develop. The management, financial, and other needs can be met from these systems, which can be developed for the practising clinician; the needs of doctors cannot be met, and never will be, by systems developed for management purposes.

Medical Informatics falls into four main parts. The first section introduces the central role of information and communications in health care and sets out the predictable consequences for health care computing of the new international market. The second section describes some of the main functions for which computers are used. The third, which perhaps might have been the most interesting for the critical clinician, covers key subject areas in health care computing, including classification and coding, outcome measures, and standards for medical data interchange and quality of data collection.

Frustratingly, in the first chapter the author identifies that future investment in health care computing needs to be directed more towards providing tools for clinical management and support and less towards simply providing data for service managers. Unfortunately, he fails to involve and excite the reader about this potential and gives no hint of the future.

The book is very valuable in the overview that it gives to the development of computing and information technology and health care. Systems that are not used widely, or perhaps unfamiliar to the reader are well explained, as are issues relating to the new international market in health care in the United Kingdom, to networks, and to privacy. The description of the various management-related systems is useful for understanding their intent and, perhaps more importantly, for their limitations. In particular, it emphasises the problems associated with the “blind” collection of data without much thought to how the vast volume may be turned into useful information.

The advent of general practice computers is described in fairly positive terms. In fact, a golden opportunity was lost; there was an ideal chance to develop and implement an innovative strategy for information technology in the primary care environment which would have been of use to practising doctors as well as to administrators. This missed opportunity reflects the parsimonious and shortsighted approach to information technology typical of health care in Britain. This is contrasted with the radically different view adopted by the European Community with funded projects such as AIM (Advanced Informatics in Medicine) and ESPRIT (European Strategic Programme of Research in Information Technology).

The chapter on outcome measures is extremely limited. Since this is perhaps one of the more important topics that need developing in health care it is sad that the approach is superficial. In contrast, the chapter on medical coding and classification is excellent. The development of the Read code is not only interesting and informative but is also the most comprehensive clinical coding system in widespread use and has the huge advantage of being able to transcend the primary and secondary care interface. Electronic data interchange and the open systems interconnections are well covered and give the manager and clinician some understanding of the issues. Any discussion of expert or advisory systems is omitted nor does the book mention any of the newer developments which may change the whole face of information technology.

Medical Informatics describes the development of medical informatics up to the present; for the sum of £60 the reader might reasonably expect a given insight into future developments. The book addresses too wide an audience and might have been better if it had focused either on the manager or on the clinician. It has fallen into the trap of satisfying neither.