Audit Reviewed

Implementing Audit in a Division of Medicine

THE SWANSEA PHYSICIANS' AUDIT GROUP

The Medical Services Study Group of the College has taken much of the initiative in establishing various forms of medical audit in general medicine in the UK. Some teaching centres, notably Birmingham[1,2] are experimenting with audit, but few reports have emerged of medical audits originating in general medical units outside teaching centres[3-5]. In December 1980 the Swansea Physicians’ Audit Group was formed with the aim of carrying out a series of audits in the general medical units of two hospitals in Swansea, West Glamorgan. In this article we describe the preparations that were required to introduce and implement audit, which may be of interest to physicians wishing to initiate audit in hospitals elsewhere.

Formation of the Group

During the last few years several clinicians in Swansea have been interested in the idea of auditing their clinical practice. This interest arose principally out of an awareness that certain aspects of clinical practice varied quite considerably between colleagues. For example, routine diagnostic tests such as chest X-rays and ESRs did not appear to be used uniformly. It was hoped that audit would determine if there was any variation in the use of tests and assist in establishing an appropriate level of use.

This interest in audit was also stimulated by reading about various published audits and by attending a conference on clinical audit organised by the Department of Epidemiology and Community Medicine in the Welsh National School of Medicine, at which the opportunity was taken to discuss possible methods of audit with clinical colleagues. There appeared to be two basic approaches to audit: either an informal peer review of clinical practice or a more formal approach involving the collection of statistical data[6].

The idea of carrying out a formal audit was appealing, but the problem was how to go about implementing the audit in practice. Fortunately, the Area Medical Officer of West Glamorgan Health Authority was keen to encourage various forms of health service monitoring and medical audit and it was he who arranged a series of lunch-time meetings to discuss the possibility of developing clinical audit in Swansea. The emphasis was on internal audit by clinicians themselves and not external audit of clinical practice by the health authority. The meetings were attended by representatives of the various specialty divisions and also by colleagues from the Welsh National School of Medicine who had some experience in carrying out audit. The concepts, aims and possible methods of audit were discussed. A visitor from the Joint Commission on the Accreditation of Hospitals in the USA also attended one of the meetings and described how audit had progressed both at national and local level in the USA. The divisional representatives then reported to their respective divisions to establish whether any group of clinicians was interested in becoming involved in audit. Within the Division of Medicine the idea was widely discussed and the general physicians emerged as the group most interested in audit. The Swansea Physicians’ Audit Group was thus formed.

Resources for Audit

The first task of the Group was to secure additional resources to assist in the process of audit. The Area Medical Officer arranged for a clinical epidemiologist who was a senior lecturer in the Department of Epidemiology and Community Medicine at the Welsh National School of Medicine and honorary consultant with the health authority to be seconded to the Group. The epidemiologist was to advise the Group on the design of the audits and the methods of collecting data, and would supervise the day-to-day running of the audits. It was also recognised at this time that any substantial collection of data could not be undertaken by the clinical, clerical or secretarial staff available. The Area Medical Officer explored with the health authority the possibility of employing a research assistant who could be seconded to the Audit Group. The health authority agreed to fund a full-time audit assistant for a six-month trial period. In fact, an additional employee was not taken on by the health authority, but an NHS administrative trainee who was interested in gaining some experience in survey work in the Health Service, was seconded to the Audit Group. The health authority also agreed to provide some additional funding for computing and other technical services required by the Group. The total potential funding allocated by the health authority was £6,000.

The implementation of audit was thus a collaborative effort involving the physicians in Swansea, the West Glamorgan Health Authority and the Welsh National School of Medicine, with the Area Medical Officer acting as a catalyst in organising the provision of the appropriate resources and expertise (Fig. 1).
Training the Audit Assistant

The audit assistant required some training in the collection and analysis of data pertaining to each audit. However, the Group also thought that the assistant should have some general preparatory training before becoming involved in a specific audit. The clinical epidemiologist undertook to teach the audit assistant about the availability and interpretation of routinely collected health statistics and the structure and content of medical records. Both routine statistics and medical records were likely sources of data for future audits. The Hospital Inpatient Enquiry, the Hospital Activity Analysis, ward admission books, registers in diagnostic departments, and other sources of health statistics were outlined to the assistant. A short attachment to a hospital medical records department gave insight into the filing and tracing of case-notes. The assistant gained familiarity with the contents of medical records by carrying out a brief survey of the case-notes of patients recently admitted to the medical wards. During this time the confidentiality of the work was emphasised to the assistant, namely, that any clinical information obtained from the records on individual patients should not be revealed.

Choosing what to Audit

Having laid the foundations for audit in terms of organisational support, acquisition of specific expertise, and training of the audit assistant, the Group then had to decide what aspects of their clinical practice to audit. Many clinical activities thought to be important and worthy of audit are unsuitable because of methodological and other difficulties. Other people involved in audit have indicated the various points they think should be considered when choosing an activity to audit[7], and these have been summarised as follows[8]:

1. The activity should occur commonly so that adequate numbers can be easily accumulated. If an audit takes many months, or even years, to complete, the information generated may be considered out of date and not a valid basis for implementing a change in practice.
2. The effect of the activity on patient outcome or on the use of resources is considered to be important. Audit may be costly and time-consuming and is unlikely to be sustained if only minimal benefits are achieved.
3. The activity can be easily defined and examined so that the collection of data is not a cumbersome procedure and the resulting information is thought to reflect accurately the activity that occurred.
4. A standard of practice can be easily defined and agreed by the participants in the audit. A consensus decision on the quality of practice is unlikely if there is no agreement on a standard.
5. The activity should be amenable to change. Although an audit might reveal scope for improvement, this improvement may never take place because of difficulties in implementing change in practice. Those participating in the audit should ideally make some
commitment to a possibility of change prior to the beginning of the audit.

A meeting of the Group was held to consider ways of deciding on what to audit. Much of the discussion centred around the views of Williamson in the USA who has had considerable experience in helping clinicians decide what to audit[9]. He recommends holding two meetings at which the content of the meetings is contained within a structured format. Each clinician in the group puts forward suggestions; they are discussed in detail and given a score relating to likely cost-effectiveness in improving patient care. The result of this procedure is the production of a priority list of activities to be audited. The Audit Group meeting in Swansea concluded that the Williamson format should not be strictly followed, but that meetings should be semi-structured, the various suggestions for audit put forward by individuals in the Group being considered against the five criteria mentioned above, and accepted or rejected. This format was followed at a further meeting and it was decided to carry out two audits in the first instance.

The first audit was to be an evaluation of the quality of the in-patient medical records. The main reason for choosing this topic was concern about the standard of record-keeping in both hospitals. A second reason was that future audits using the record as a source of data would require a high quality of recording. The second audit was to be an audit of the use of hospital resources as ordered by physicians in the Group. The aim of this audit was to identify areas in which savings in the cost of practice might be made. It was decided to audit retrospectively the use of diagnostic tests, drug treatment, length of stay and number of follow-up appointments after discharge for patients who were admitted in 1980 with an acute myocardial infarction, an acute exacerbation of chronic bronchitis or a cerebrovascular accident. These two audits are now in progress. Their results will be published at a later date but preliminary analysis suggests that information is being produced which will be both interesting and useful in the attempt to improve the effectiveness and efficiency of clinical practice.

The Audit Group

The Swansea Physicians' Audit Group comprises Dr K. E. Evans, Dr H. Jones, Dr D. Daley, Dr J. N. Harris-Jones, Dr R. R. Ghose and Dr H. A. Rees. Dr F. G. R. Fowkes is the clinical epidemiologist, Mrs S. M. Page the audit assistant, and Dr D. Phillips-Miles the Area Medical Officer to the West Glamorgan Health Authority. Dr S. Francis, senior registrar in Community Medicine, carried out the trial audit.

This report was prepared on behalf of the Audit Group by Dr F. G. R. Fowkes. Further enquiries should be addressed to him at the Department of Epidemiology and Community Medicine, Welsh National School of Medicine, Heath Park, Cardiff CF4 4XN.

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