

EDITORIAL

Clinical practice guidelines

A public health perspective

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Improving the quality of health care has been a pre-occupation since antiquity, one of the first recorded instances being found in the Babylonian Hammurabi code approximately 4000 years ago. Progressively, more stones were added to the edifice of quality in health care: the development of the experimental method, and the search for causes of diseases and for effective remedies. In addition, more specific interventions to improve quality of care were progressively introduced, such as the regulation of training and licensing of health professions and the accreditation (or other regulation) of hospitals and health care organizations. Indeed, those attempts to improve quality of care were developed with a public health perspective in mind. Other developments, often directly imported from the pre-existing tools and processes used in industry and service sectors, have occurred in recent decades, fostered by the rapid changes in most health care systems, the numerous health care technologies available and increasing health care costs.

Clinical practice guidelines, clinical or critical pathways or protocols constitute one set of instruments aimed at improving the process and outcome of health care. Guidelines are fashionable; they have often been looked at positively or even with enthusiasm by health care administrators, managers, health plan directors and health care decision and policy makers.¹ However, they have also often been criticized by many, including clinicians, who have seen them as an initiative to decrease independence and professionalism, but also because of the uncertainty regarding the effectiveness of guidelines to improve quality of care eventually.¹

QUALITY OF CARE AND GUIDELINES

Although it is widely acknowledged that it is difficult to define quality of care, certain elements are common, explicitly or implicitly, to many definitions of quality of care. First, the indication to perform a medical procedure or intervention – diagnostic, prognostic, therapeutic or preventive – should be justified or appropriate, meaning that the expected positive outcomes of the intervention (i.e. its effectiveness) should significantly outweigh its

possible negative effects. Second, when the decision to perform the intervention has been made by the patient and the physician, the proficiency of the care provider should be guaranteed. This could mean, for instance, that the team involved in the whole process of a surgical operation should be properly trained and experienced or that effective measures are taken to obtain an optimal adherence to the treatment. Third, care must be delivered with proper respect for interpersonal relationships between health carer professionals and patients, with humanity and empathy, while preserving patient autonomy. Fourth, equity of access to and delivery of quality care should be guaranteed for all members of a population, within the limits of available resources.

Clinical practice guidelines have been defined as 'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances'.² Guidelines are proposed by many groups and authorities at the international, national, regional or local level. Approximately 6,000 published articles have been indexed as guidelines (publication type) in the Medline database and there are many more that are either not indexed or unpublished. Guidelines should help improve or maintain the four aspects of health care mentioned in the previous paragraph (appropriateness, proficiency, humaneness and equity).

OVERUSE AND UNDERUSE OF MEDICAL CARE

According to the aforementioned definitions, overuse of care is present when an intervention is proposed for an inappropriate indication (i.e. the expected benefit of the intervention is not significantly higher than its possible negative effects). Guidelines are being advocated as a tool to improve quality of care, by helping to reduce overuse of care. However, in an era of cost containment and of rapid and profound change in most health care systems, guidelines are also being promoted with the idea of decreasing costs by diminishing inappropriate care.

This idea is often put forward without considering the other side of the coin, underuse of care. Underuse has been defined as the non-provision of crucial or necessary care, the latter being defined as care that is not only appropriate, but care that it would be negligent not to propose to the patient in a particular situation.³ Underuse of care can be observed in population subgroups who have no or only difficult access to health services, in patients who do not use health services even though they have

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access to them and in patients occasionally or regularly in contact with a physician. This is a well-known issue in preventive medicine, but has also been reported in diagnostic and therapeutic care. In addition, the coexistence of under- and overuse of care in the same patient population has been observed in various health care systems. For instance, based on an observational study of the utilization pattern of upper gastrointestinal endoscopy in over 8,000 patient visits in ambulatory care practice, it was estimated that there was approximately the same number of cases of overuse as there was of underuse of this diagnostic procedure.^{4,5}

This example illustrates that, if guidelines concerning the appropriate use of upper gastrointestinal endoscopy were to be implemented and generally followed, the crude output could be an improvement in the quality of care delivered because of the simultaneous decrease in both under- and overuse of the procedure, but with no change in the total number of endoscopies performed and, perhaps, actually an increase in short-term costs, if we consider the additional resources required to implement a screening programme to detect over- and underuse. Various hypotheses might be proposed for the impact on mid- or long-term costs, depending, for instance, on the effect of reducing underuse of (early) diagnostic and therapeutic interventions on the discovery and effective treatment of curable disease.

Among the other possible effects of broad implementation of guidelines, assuming that the guidelines will be made available to the population at large, there could be an increase in the awareness of the population of the need for using health services and, therefore, more frequent requests for the procedures available. Furthermore, in the grey zone between over- and underuse, physicians accustomed to proposing (costly) medical interventions with discretion may feel pushed by guidelines to use them more often in a defensive medicine era.⁶ On the other hand, excessively rigid adherence to guidelines may lead to denial of access to procedures to patients who, because of their unusual situations, may actually benefit from them, with the net result being an increase in the underuse of an effective procedure.

CLINICAL PRACTICE GUIDELINES

There are some indications that valid and carefully implemented guidelines may indeed improve the quality of care.⁷ However, as indicated previously, there might be no accompanying cost saving. Furthermore, much effort is spent in the development of thousands of guidelines at various levels, from the international association to the local hospital and, for many of them, there are doubts about their quality and validity. Building on existing developments, the promotion of a concerted international – or European – action could create and improve a programme of valid and continuously updated guidelines aimed at covering the salient aspects of medical care. In fact, a European concerted action is currently involved in the process of developing a common appraisal instrument for guidelines,⁸ which has been based on previous

work conducted in the UK.⁹ It may eventually turn out that guideline developers will use the European appraisal instrument as a guide for guidelines development.

If valid guidelines could be produced at a supranational level, the effort at the national, regional and local levels could then be concentrated on adapting, adopting, diffusing and implementing the guidelines for the end users (physicians, nurses, patients, etc.). It is indeed acknowledged that guideline implementation, which is a crucial step towards success, is all too often neglected.

Guidelines are considered as possible tools for implementing evidence-based medicine. Ideally, evidence should be derived from high-quality studies. For most questions, such information does not exist and we have to rely on other methods to produce valid guidelines. When developed following a rigorous methodology, consensus and other expert based development methods can produce good quality guidelines.¹⁰ Using one particular method (RAND appropriateness method) two European, multinational, multidisciplinary expert panels have recently succeeded in developing explicit appropriateness criteria for the use of upper and lower intestinal endoscopy (Lausanne, Switzerland, November 1998) and coronary revascularization (Madrid, Spain, December 1998). These criteria will form a basis for the development of practice guidelines. How these guidelines, developed at the European level, will be received, accepted, adapted and adopted in various European countries is still unknown.

An initiative aimed at developing high-quality, Europe-wide guidelines is attractive, but will certainly be an idea difficult to promote and a development programme problematic to implement. However, the rapid development of the Cochrane Collaboration might be cited here for two reasons: first, it is an example of an active and productive international collaboration and, second, its products, the systematic reviews and the databases of clinical trials and studies, are necessary ingredients for the development of high-quality, evidence-based guidelines. Indeed, high quality evidence should ignore borders. However, variations in practice, health care organizations and availability and the relative costs of medical procedures and products within European countries are definite sources of difficulty in developing common guidelines. Variations in models of care as well as in medical and general culture constitute additional barriers to the development of common European guidelines.

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EDITORIAL NOTE

Child health, dissertation abstracts, new technology and revised contact information

DON ODOM, Managing Editor

CHILD HEALTH

The section on international child public health resulting from the recent call for papers¹ has been re-scheduled for publication in the September 1999 issue. Papers which have completed the review process in time will be included in the section or if completed later will be included in the next available issue.

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