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Comments on “Health economic evaluation in lumbar spinal fusion. A systematic literature review anno 2005”

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The authors have presented an interesting review dealing with a hot topic: cost-effectiveness in spine surgery. In the field of healthcare management, full health economic evaluations including cost-effectiveness analyses (CEA) and cost-utility analyses (CUA) are increasingly requested by those responsible for fund allocation. In both CEA and CUA, the cost difference between two treatment alternatives is illustrated in the numerator, and the difference in treatment effects in the denominator. The result is given as a ratio reflecting the extra cost per extra effect unit gained by using one treatment instead of another, the incremental cost effectiveness ratio (ICER). Thus, CEA and CUA relate to our ambition to select the best available treatment for the money available, and could therefore serve as a bridge of understanding among clinicians, managers, healthcare policy-makers and politicians.

Two reviewers, one health economist and one clinician were reported to be involved in the study, which should be accepted as a minimum. The used methodology is accurate, making use of a merged instrument for assessing the quality of the included studies [2, 8, 9].

Few relevant health economic studies dealing with CEA in the field of lumbar spinal fusion were found, which accurately reflects the current

state of affairs. One British study, which should be analysed according to the method used in the current paper, was recently published [6]. All but two studies reported ICER from the perspective of the healthcare sector (in this case, hospitals). The authors therefore chose to exclude results from a societal perspective. However, it should be noted that the healthcare perspective is mainly of concern to local healthcare administrators, while most other parties are interested in the societal perspective, where the economic implications of being off work are also considered. Since this is far more costly than the actual healthcare costs [3], future studies would benefit from including also the societal perspective.

One problem with CEA and CUA is the use of different methods in collecting information on costs, as well as different outcome instruments and measuring techniques and also somewhat different study populations. This is one reason why it has so far been difficult to use results from CEA/CUAs to decide on priorities among specific treatment options in the surgical field. The situation is somewhat different in the pharmaceutical field where reported cost-effectiveness is frequently used to support or reject reimbursement of drugs [4]. Consequently, the authors stress the importance of

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raising the awareness of health economic evaluations and agreeing on methodological issues.

The Panel on cost-effectiveness in the US has dealt with this challenge for approximately 10 years [7], and the Spine Society of Europe (SSE) also recently addressed it, when a Health Economic task force including clinicians, economists, epidemiologists and statisticians, was established in 2004. Besides discussing theoretical issues on methodology and how to analyse and present data, this group will be able to give practical advice on protocols and outcome instruments. Recently they also decided to arrange instructional courses in health economics.

In conclusion, the authors are to be congratulated for helping to put health economic analyses in the field of spine surgery on the agenda, and hopefully, future clinical studies will more often include a health economic evaluation related to clinical outcome. If a CUA is

feasible it would be advantageous to include that, using a preference-based outcome instrument, like the EQ5D or SF-6D [1, 5]. These instruments are used to measure patient perceived changes in quality of life after a given treatment (utility), and if these differences are correlated with time, they can be expressed in terms of gains or losses in quality-adjusted life years (QALYs).

Reporting costs per QALY will make it possible to discuss priorities among different treatment options—not only within the same diagnostic entity, but even among different diagnostic entities. This will increase interest in these analyses within the profession as well as among fund holders.

However, the ethical concerns inherent in health economic evaluations should not be taken lightly, and must be discussed and analysed continuously by the profession.

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