Medical-economic assessment in orthopaedic surgery: Study appropriateness and choice of indicators

Hospital facilities are under pressure to adjust to a changing economic environment and the introduction in their management of T2A (casemix-based hospital payment system) is an illustration of this transformation. Financial analyses, most particularly on the costs of a medical procedure, allow one to study not only the feasibility of a project or a new technique, but also to verify the management efficiency of the activities already in place and the proper use of the resources available.

Assessing the cost of an activity means freezing the image of one’s own activity and thereby analyzing one’s environment beyond the medical procedure. First and foremost, to be useful, a medical-economic publication must be precise: this means precision in the terms used, the method, the value units, and the limits of the study.

These articles first provide the means to appraise a particular activity, and then also allow other institutions to evaluate their costs through benchmarking [1]. This approach allows that activities to be compared with the objective of taking the best of each while preserving one’s distinctiveness: hence the importance of predefined, and, whenever possible, common indicators.

The following articles are the illustration of pooling the resources of the physician and the healthcare administrator; precise and well-known work units, and a process taken in its entirety. Comparison using the National Scale of Costs under common methodology (Échelle nationale des coûts à méthodologie commune) is important: since many institutions abide by this standard.

It would indeed be advantageous for the article evaluating the cost of total hip arthroplasty revisions for infection to follow this methodology. From a medical-economic point of view, the indicators proposed would require greater precision and clarity, notably on the work units used. However, this article is useful in that it provides an internal comparison within a given healthcare structure of the additional costs related to managing the resulting infection. This is an important argument in advocating the creation of Reference Centers for Treating Complex Osteoarticular Infections (centre de référence des infections ostéo-articulaires complexes) with the healthcare administrative authorities.

The most relevant indicators are based on the actual costs borne by the institution: for example, the cost of staff salaries that take into consideration the age pyramid, contrary to average costs that smooth it out. This can also involve the Relative Cost Index (indice de coût relatif [2]), which represents the actual activity in the operating room or the actual consumption in pharmaceutical expenses. However, the real-costs method is not easily applied to structural costs, which very often result from internal policy. It is indispensable to consider indicators with a certain objectivity: for example, the mean hospital stay duration can be calculated by including outpatient stays, but also by excluding them, giving completely different results. The same holds true regarding depreciation, notably for the operating rooms: a low cost can mean old equipment, but a high cost does not necessarily suggest new equipment.

Although no absolute truth exists on the method, this type of study has the advantage of taking into account the medical act in its entirety and it opens the discussion on the appropriateness and cost of certain medical activities.

References
Medical-economic assessment in orthopaedic surgery

E. Connan
Musculo-skeletal Unit, Pharmacy Unit, Medical Pharmacology and Clinical Nutrition outpatient Department, Lille Regional Teaching, CHU de Lille,

université Lille Nord de France,
59000 Lille, France

E-mail address: e-connan@chru-lille.fr