

## CHAPTER 4

### A new instrument for the assessment of pharmacoeconomic studies

# FROM THEORY TO PRACTICE: HOW TO ASSESS THE QUALITY OF PHARMACOECONOMIC STUDIES?



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An educational volume about pharmacoeconomics for hospital pharmacists should not only contain information on concepts and practical applications, but should also provide them with an instrument to apply pharmacoeconomics in everyday working life. The application of pharmacoeconomics in hospital pharmacy starts with reading literature and reports. These may have different backgrounds, for example, scientific papers reporting on pharmacoeconomic studies in scientific journals or reports from pharmaceutical companies or from agencies issuing guidance on drug selection. The question is whether all these reports are relevant for the hospital pharmacist and should have the same impact on his practice? Indeed high quality studies should have a higher impact. This leads to the question: how to assess the quality of these reports?

Assessing the quality of pharmacoeconomic reports is perhaps similar to rating the effectiveness of a drug or the quality of consumer goods. It is the design of the relevant test and the rigour with which it has been performed that determines the credibility of the outcome. A well-known example is the way clinical studies into the efficacy of a drug are rated according to the principles of evidence-based medicine. The gold standard is the randomised clinical trial, which produces the highest credibility (rating). The expert opinion on the efficacy of a drug or a case report receives the lowest weight.

When designing the outline of this book we found it tempting to develop an assessment instrument for the quality of pharmacoeconomic studies. Which studies should really have an impact because of their high quality of design and performance, and which studies deserve a lower impact due to flaws in design or execution? The real challenge was to design a scorecard that would also help the hospital pharmacist who may be less experienced in pharmacoeconomics. Tools for the experts are available and guidelines have even been published by ISPOR (International Society for Pharmacoeconomics and Outcomes Research, [www.ispor.org](http://www.ispor.org)). The question was: can they be simplified so that a wider audience can apply them, whilst still achieving a meaningful result?

We were happy to find partners to share this ambition in a team of researchers from the University of Leuven (Professor Steven Simoens, Professor Ludo Willems and Mr Thomas De Rijdt) and together we designed a project aimed at a simplified assessment instrument. The result is in the form of a scorecard, accompanied by two papers. One paper describes how the project was designed and executed. A second paper describes the background of the scorecard and how it should be used. During the process intermediate versions were discussed and tested. An international working party was formed which discussed the merits of a preliminary version of the scorecard. Subsequently, this working party was supportive in a larger field test among colleagues. You will find their names in the acknowledgements of the relevant articles.

Have we succeeded in our objectives? We think that the answer is positive. However, it appears that a basic knowledge of pharmacoeconomics is indispensable in finding the right answer to several of the questions. In that respect the process was more challenging than we had anticipated.

The scorecard will be available, both in print as well as in electronic format, as an automated spreadsheet from the website of the publisher, [www.ppme.eu](http://www.ppme.eu). The advantage of the latter is that after a more extensive experience in practice, revisions can be produced and disseminated easily.

We wish to thank all who have been supportive in developing this practical scorecard. Mrs Lasia Tang, our publisher, took care of the organisational aspects of the project and Mrs Michelle Gallacher provided indispensable expert editorial support. It was our colleague, Mr Thomas De Rijdt from Leuven University Hospital, who really did the major part of the work. We are also grateful to Amgen for their trust in supporting this project with an unrestricted educational grant.

We would welcome feedback on this first version of the scorecard. Please send your feedback to: [editor@ppme.eu](mailto:editor@ppme.eu) to enable us to make continuous improvements.