## TitleUse of Scorecards in HospitalsAgencyNOKC, Norwegian Knowledge Centre for the Health Services<br/>PO Box 7004, St Olavs plass, NO-0130 Oslo, Norway;<br/>Tel: +47 23 25 50 00, Fax: +47 23 25 50 10; post@nokc.no, www.nokc.noReferenceReport no 19-2007.<br/>www.kunnskapssenteret.no/filer/malstyring\_nettversjon.pdf

## Aim

To assess whether the implementation of 'scorecards' in hospitals provide better strategies, better management, or better hospital quality.

## Conclusions and results

Hospitals have implemented different tools for performing 'evidence based' leadership to meet the challenges of modern hospital management. The Balanced Scorecard (BSC) and EFQM Excellence Model (EFQM) are among such tools. The key mission of these is to provide a system for evaluating the organization from several predefined perspectives.

*Results:* We retrieved 639 possibly relevant publications, whereof 71 articles were obtained in full text, and 5 studies were finally included. Four studies reported experiences from implementing BSC and one study reported on EFQM.

Included studies described that scorecards may be useful at a local level to define strategic aims, measure quality indicators, define lower levels for quality action, compare departments over time, or evaluate implementation of new treatment options. We found no evidence that implementation of BSC or EFQM influenced hospital management or quality.

- Three studies reported results in different areas after implementing BSC at a hospital department level: emergency unit, anesthesia department, and nephrology department. The studies described development of criteria and indicators for measuring, but could not relate the results to implementation of BSC or EFQM.
- Two studies reported results on an institutional level. One study used EFQM to evaluate the implementation of evidence based treatment processes in an addiction center in the Netherlands. Another study used indicators in the BSC model to compare one hospital in Japan with a Chinese hospital. Both studies assessed the models as useful for measuring quality.

*Conclusion:* Research on the usefulness of scorecards is especially challenging since scorecards may influence different levels in a hospital and affect different time points.

- There is no evidence that BSC or EFQM influence hospital performance.
- There are descriptive reports on scorecard usefulness for different purposes in local settings.
- Time series with several pre- and post-measurements would add to our understanding of the usefulness of scorecards.
- More research and development of suited methodology are needed.

## Methods

A systematic literature review was conducted using a defined search strategy and predefined criteria for selecting studies. Two researchers, independent of each other, assessed quality, extracted data, and summarized the results.