

Risk adjustment in health outcomes assessment: The 'new paradigm' for performance evaluation.

Sousa P., Reis V., Pinto F.

Objective:

The aim of this work is to make an accurate assessment of the results obtained by different institutions and health care plans in order to encourage the inclusion of risk adjustment methodology to account for patient differences.

Methods:

There is an emphasis on patient-centred care in most health care systems in Europe. The establishment of quality standards, and consequent benchmarking, based on patient outcome data is a rational means of differentiating the quality of health care in the marketplace. The use of methodology of risk adjustment, based on clinical data, to check the calculation of the differences between patients, groups and populations, as regards outcomes, is being used, in the new health politics centred in the accountability, to validate a reliable and balanced comparison of results between institutions and healthcare plans. Institutional variation in a patient's baseline clinical risk precludes the direct comparison of outcomes, across institutions.

This work took the research design of a case-control study. The data analysed related to all patients who underwent Percutaneous Coronary Intervention and are included in the Portuguese National Registry of Interventional Cardiology, during the last three years. Data was collected from the National Registry of Interventional Cardiology Database and analysed on a descriptive and analytical statistical treatment (SPSS 14.0) using simple and multiple logistic regressions.

Results:

We found the same variables that showed greatest predictive value for the occurrence of adverse events, such as advanced age (80 years), diabetes, chronic renal failure, impaired ejection fraction (<30%), priority at PCI, multi-vessel disease, type C lesions, acute myocardial infarction and cardiogenic shock, similar to the majority of results found in similar multi-centre international studies carried out with large populations.

Conclusions:

This study by allowing us to code and group patients according to the risk of having a major adverse cardiac and cerebral event, provide a means of promoting and monitoring quality improvement efforts in interventional cardiology, as well as improving the knowledge about the trends of patient, healthcare delivered and disease patterns. In addition, the use of risk adjusted methodology, based on clinical data, is an important tool for quality improvement. This study represents an important contribution to the quality assurance of health care delivery and for more efficient risk management.