Impact of a regional project on patterns of care for acute myocardial infarction

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Abstract

BACKGROUND:

On May 2003 the Emilia-Romagna Regional Commission for Cardiology and Cardiac Surgery launched a project aimed at improving health service ability to adopt interventions of well-known effectiveness for the treatment of patients with acute myocardial infarction. One of the main goals was to stimulate the clinical and organizational responsibilities operating at the local level, in order to improve the frequency of use of primary percutaneous coronary intervention.

METHODS:

In assessing the overall impact of this regional project, an interrupted time series regression analysis was conducted, relying on information drawn from the regional hospital discharge database. Overall, 18,957 patients admitted for acute myocardial infarction during the period January 2001-June 2004 were considered.

RESULTS:

One year after the inception of the regional project, the estimate of its effect documented a statistically significant increase in the frequency of use of percutaneous coronary angioplasty (5.8%, 95% confidence interval 4.6%-6.9%), paralleled by an increase (3.2%, 95% confidence interval 1.14%-5.0%) in the number of those directly admitted to centers with interventional cardiology facilities. No effect was observed as for the proportion of patients admitted to highly specialized departments.

CONCLUSIONS:

Despite the obvious limitations due both to source of information and study design, our findings document that the regional project had indeed some tangible impact, although variable across the different geographic areas of the region, on key aspects of the patterns of care of patients with acute myocardial infarction.