European Hospital Benchmarking in Acute Coronary Syndrome: the EURHOBOP project

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BACKGROUND

EU Member States efforts are aimed at improving the quality of the provided health care systems and at tackling inequalities among European citizens. Coronary heart disease kills more than 2.000.000 people in Europe every year and, if acute cases (> 700.000 in age range 35-64 years) are not adequately managed, it may result in a high case fatality. Benchmarking the hospitals performance is a key instrument to improve the quality of the provided health care.

STUDY OBJECTIVE

To validate a set of predictive mathematical functions (developed in the EUPHORIC DG SANCO project 2004-08) that include determinants of in-hospital case fatality quality indicators, to assess the quality of management of myocardial infarction (MI) or unstable angina (UA) patients, and of the following procedures: coronary angiography, thrombolysis, percutaneous intervention. The indicators will be adjusted for patient, hospital and country characteristics and will permit European hospitals to follow their trends in outcomes and benchmark themselves in a European ranking.

METHODS

Study subjects: Patients admitted for an acute coronary syndrome (ACS) with discharge diagnosis of MI or UA coronary angiography, thrombolysis, or percutaneous revascularisation (angioplasty with or without stenting) Sample of at least 200 consecutive patients from 10 hospitals in Germany, Spain, Finland, Italy, Greece, Portugal, and France

Methods: Validation of several risk functions (hierarchical logistic mixed regression models) with different levels of adjustment

Outcome indicator: In-hospital case-fatality

RESULTS

Sample characteristics

Validation of the EUPHORIC benchmark functions

- The EUPHORIC functions are valid:
  - The predicted case-fatality is accurate
  - The estimated coefficients in EURHOBOP and EUPHORIC are similar
- Three procedures/clinical events (AMI, angiography, PCI) will be used for benchmarking hospitals in ACS management in Europe
- In-hospital case-fatality in these patients is above 6% with variability among countries and hospitals

HOW TO COLLABORATE AND BENCHMARK YOUR HOSPITAL

- European hospitals can register at http://www.EURHOBOP.eu as Collaborating Partners and submit data from at least 200 consecutive patients with a discharge diagnosis of MI or UA

Data entry form at the EURHOBOP homepage

Examples for the presentation of the benchmarking results