The EUROTRACS project
European treatment and reduction acute coronary syndrome cost analysis

Jaume Marrugat, EUROTRACS coordinator, Institut Hospital del Mar d'Investigacions Mèdiques (IMIM), Barcelona, Spain.

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SUMMARY

Coronary heart disease (CHD) is the single most common cause of death in Europe. At the same time, patient safety and quality of care have become major issues in the European agenda. These facts, and the lack of cost-effectiveness data for cardiovascular interventions at the population level led to the EUROTRACS project. EUROTRACS had 14 partners and lasted from 06/2013 to 06/ 2015.

OBJECTIVES

EUROTRACS aimed at analyzing the cost-effectiveness of:
1)Population interventions to prevent CHD incidence (by reducing smoking, dyslipidemia, and hypertension prevalence at the population level), and
2)Percutaneous coronary intervention (PCI) in the management of acute coronary syndrome (ACS) patients (with emphasis on elderly patients).

METHODOLOGY

The Framingham coronary risk function, adapted to the participating countries, was used to examine population interventions to reduce CHD incidence. The effect of PCI on ACS patients mortality was analyzed in a cohort of 95,000 European ACS patients from 2000 to 2014, and propensity score (PS) for PCI divided in tertiles. Cost-effectiveness was analyzed using Markov Models, which included the effect of population interventions or PCI and country specific cost data.

COORDINATION

Partners met every month by teleconference to review the progress of the project and to discuss the tasks to be done. Partners also met in person 3 times during the project. The coordinating partner organized on-site visits to speed up project activities such as the development of on-line tools.

DISSEMINATION

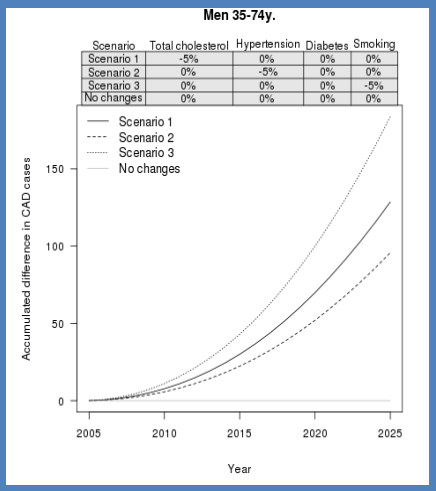
A dissemination plan was developed. The main outputs of this plan were:
-A promotional leaftlet
-The project website
-The final leaflet and brochure
-The layman version of the main results
-Presentations at local and international congresses
-Preparation of manuscripts (1 already published)

EVALUATION

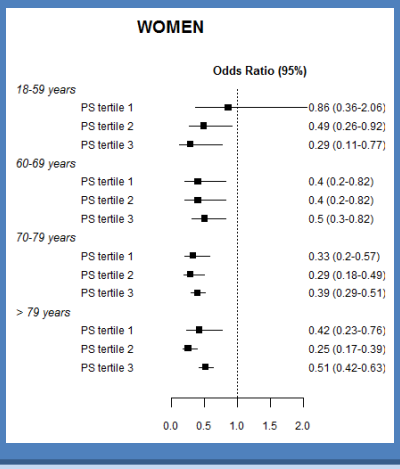
Four process and four outcome indicators were evaluated. All were completed at a 100%. On average, 89% of partners took part in meetings and teleconferences. The average delay of deliverable submission was 0.6 months.

RESULTS & CONCLUSIONS

•The most cost-effective population intervention to reduce CHD incidence was to reduce smoking prevalence (figure below). This intervention cost <50,000 € per quality adjusted life year gained (QALY).



•PCI reduced in-hospital mortality in ACS patients regardless of gender, age group and presence of ST segment elevation, except in women aged 18-59 years at the lowest indication for PCI (PS tertile 1, figure below). This intervention cost <10,500 € per QALY in the cases with clear indication.



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Leader organization: Institut Hospital del Mar d'Investigacions Mèdiques (IMIM), Spain.
Contact person: JMarrugat@imim.es

Associated partners:
Hellenic Collrge of Cardiology – Greece
Helmholtz Zentrum München GmbH – Germany
Instituto Superiore di Sanità - Italy
Department of Epidemiology Lazio Regional Health Service – Italy
University of Porto Medical School – Portugal
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