Costs of the colorectal screening program in a single region of Italy

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1. PREMISE

- Prevention of colorectal tumors as a priority in Italian health policy only in recent times.
- Year 2004: Emilia Romagna is the first Italian region to implement a colorectal screening program (CSP) covering the resident target population in its entirety. Each local health agency (AUSL) operating in the region’s nine provinces is left free to choose the organizational model for its CSP.
- Year 2008: Since no study on the matter had been carried out in the region before, an in-depth survey on cost, effectiveness and efficiency of CSPs in Emilia Romagna was commissioned by the Italian Health Ministry.
- The purpose is to build a complete and reliable analysis of the implementation costs of the prevention program, on the basis of the different organizational models adopted by each AUSL involved.

2. METHODS

Reference year: 2007
A survey covering all nine provinces of Emilia Romagna (total population 4,223,264), i.e., a target population of 1,073,161 individuals in the 50-69 age range. Ad hoc questionnaires and interviews to officials from the AUSLs involved.

Collection of data and information on the organization of SCP implementation, on the cost of diagnostic tests and on the cost of clinical treatment (medical examination, colonoscopy, polypectomy).

After quantifying the use of consumables, personnel and facilities in the different organizational models, the total cost of SCP implementation was estimated on the basis of representative prices of consumables, wages, and depreciation quotes.

Effectiveness (e.g., % of invited individuals actually joining the SCPs) and efficiency indicators (total cost per invited individual, per FOBT screened individual, per colonoscopy treated patient) were calculated.

3. RESULTS

The study estimated the total cost of Screening Colorectal Program implementation in Emilia Romagna (total cost around 5 million €) and in each AUSL. Estimates were broken down by SCP implementation level (pre-diagnostic, diagnostic, clinical treatment). Due to the different organizational models adopted, efficiency indicators varied remarkably for each AUSL.

4. CONCLUSIONS

The survey highlighted the importance of a comprehensive knowledge of the organizational aspects, of the costs and of the efficiency of Screening Colorectal Program implementation not only for better planning in the field of prevention of colorectal tumors, but also for the improvement of health policy-making.