

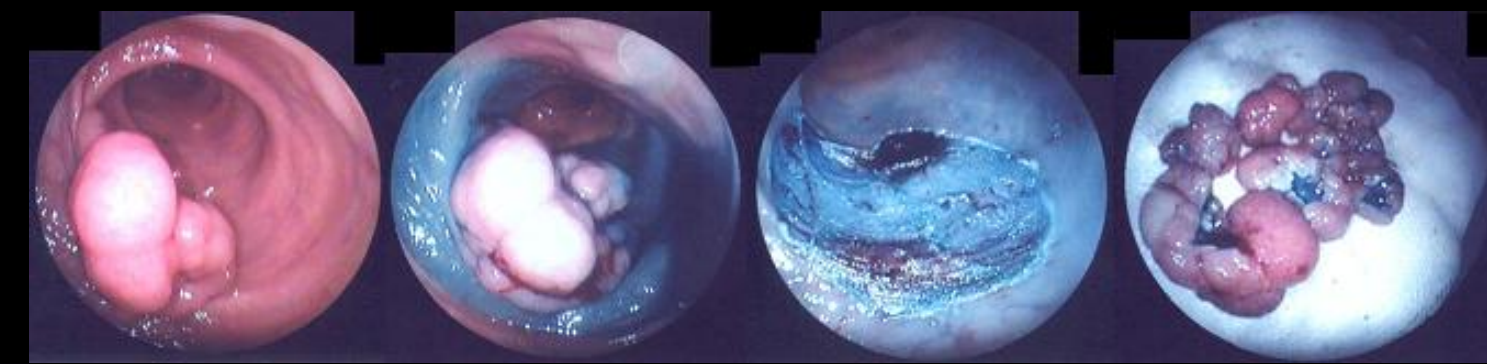
Costs of the colorectal screening program in a single region of Italy

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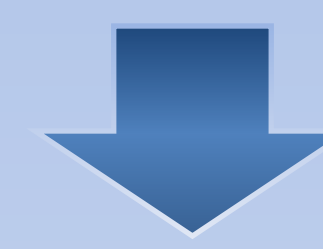
1. PREMISE



- **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).

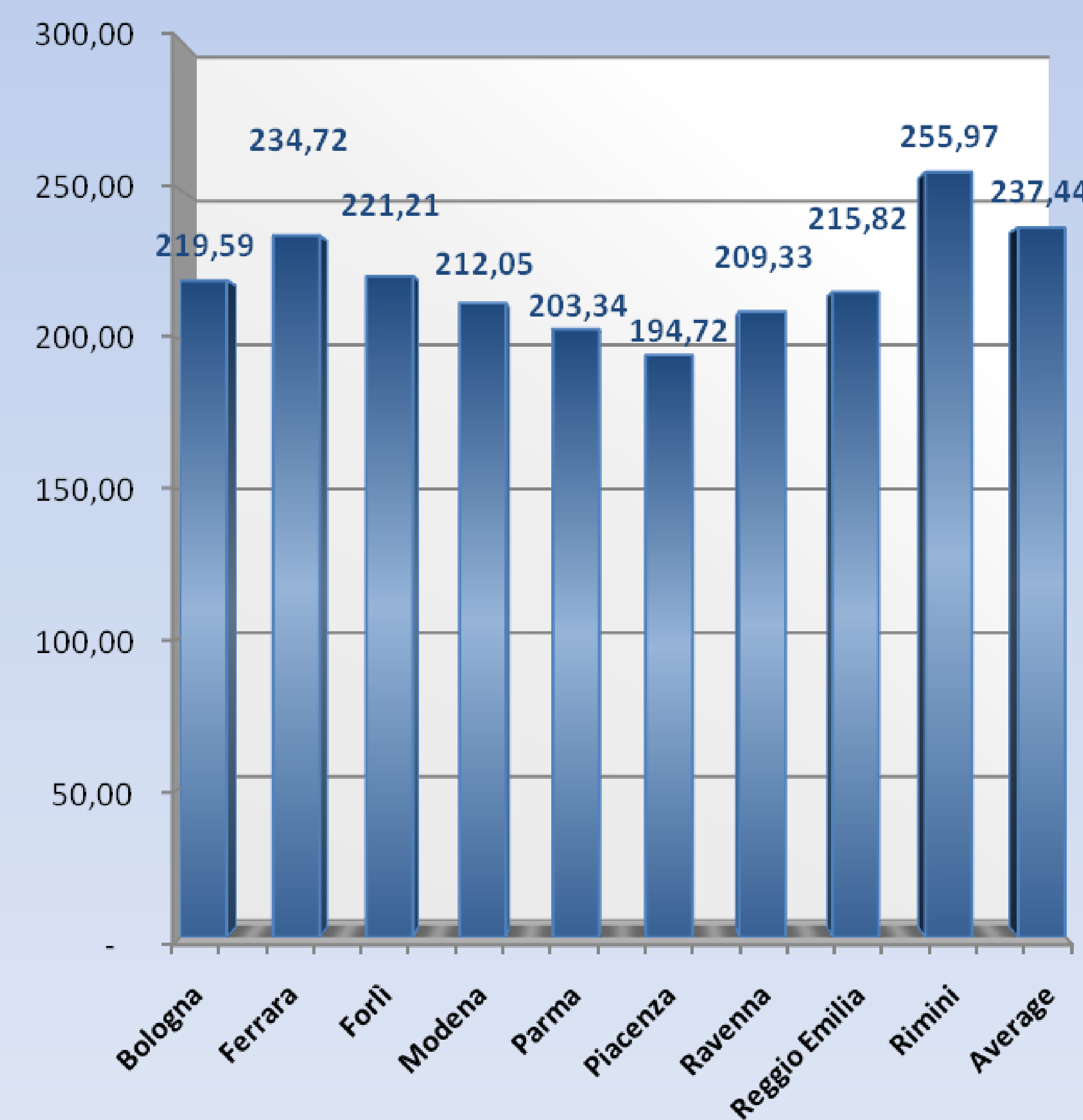
After quantifying the **use of consumables, personnel and facilities** in the different organizational models, the **total cost of SCP implementation** was estimated on the basis of **representative prices of consumables, wages, and depreciation quotas**.

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.

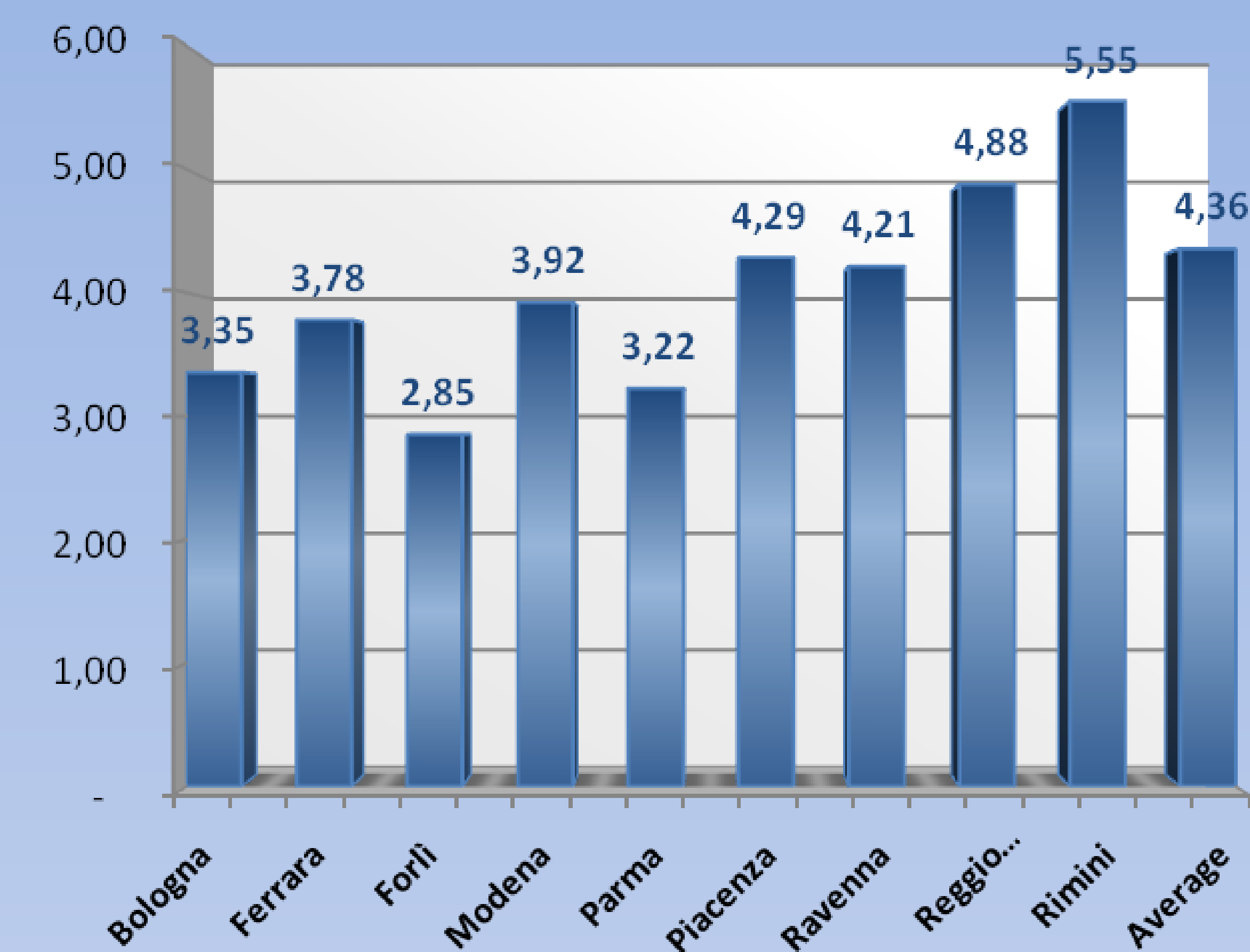
3. RESULTS

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

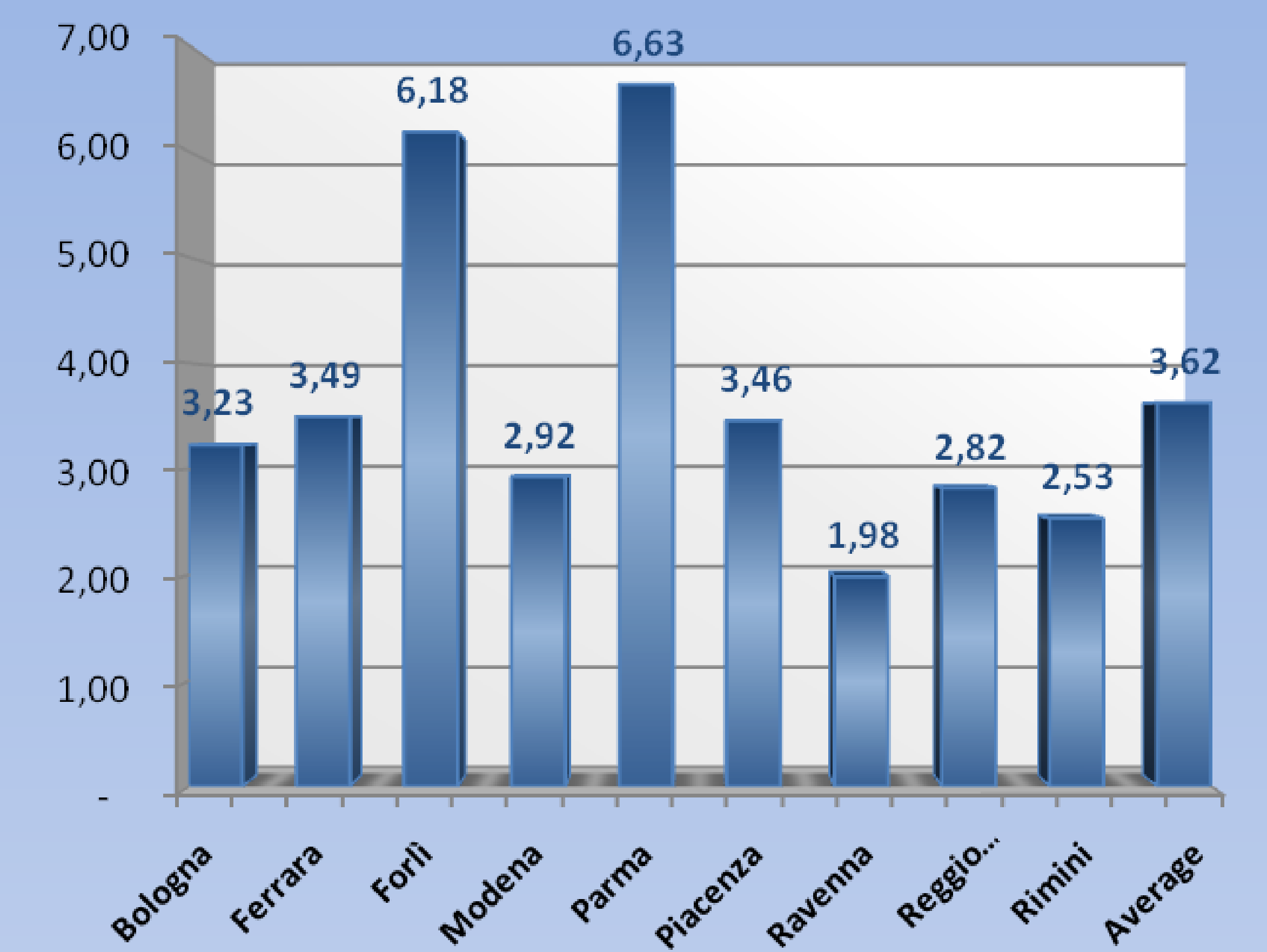
Clinical treatment level: cost per treated patient



Pre-diagnostic level: cost per invited individual



Diagnostic level: cost per screened individual



Total cost of Colorectal Screening Program per invited, screened and treated patient

Total cost of CSP per invited individual: average: 11.11 €, varying between 8.35 and 13.57 €.

Total cost of CSP per FOBT screened individual: average 24.45 €, varying between 16.88 and 28.08 €.

Total cost of CSP per colonoscopy treated patient: average 516 €, varying between 396 and 650 €.



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.

