

## **Impact of computed tomography coronary angiography on other diagnostic tests.**

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### **Source**

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### **Abstract**

**Objectives:** Information on the impact of computed tomography coronary angiography (CTCA) on patterns of care is scarce. In particular, it is not clear if, and to what extent, its adoption actually leads to a reduction in the use of other diagnostics tools. The aim of this study was to evaluate whether the adoption of CTCA in Emilia-Romagna (an Italian region with a population of 4.4 million) had any effect on utilization rates of myocardial perfusion scintigraphy (MPS) and coronary angiography (CA). **Methods:** Interrupted time series (ITS) were applied to monthly volumes of MPS and CA tests performed from 2003 to 2010, to assess trends in usage rates for those procedures before and after CTCA was adopted by all the healthcare organizations operating in the region. **Results:** After an increase in the first year of CTCA introduction, its use remained stable over the study period. After September 2006, a significant decrease in MPS volumes (31 percent;  $p < .0001$ ) and a much less tangible decrease in CA volumes (5 percent;  $p < .0001$ ), were detected by ITS analyses. **Conclusions:** This study demonstrates that the use of CTCA had a greater impact on MPS usage rates than on CA.