



## INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

## Projekt: Projekt OP VK CZ.1.07/2.3.00/30.0034 "Podpora zkvalitnění týmů výzkumu a vývoje a rozvoj intersektorální mobility na ČVUT v Praze"

## Cost-effectiveness studies on medical devices: application in cardiology

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Abstract. Current discussions about cost-effectiveness in the field of medical devices for cardiology are reviewed. In order to identify the trends, we performed a review of studies published in medical journals. After having reviewed 1143 originally identified papers, we finally selected 61 papers to be studied in detail. The selected papers are classified into two categories: diagnostic and therapeutic medical devices, while technology for telemedicine is briefly mentioned. In each category, cost-effectiveness results of chosen modalities are presented. The main trend seems to be avoiding invasive technology during the treatment. This trend is obvious both in the field of diagnostic and therapeutic devices. In CAD diagnostics, some authors try to prove that CT, PET or SPECT are more cost-effective than ICA. As compared with the classical (open chest) surgery in the past, the treatment of cardio-vascular illnesses is moving to less invasive interventions (TAVI versus SAVR is just one example).