

Economic evaluation of ICPs for Hip Fracture

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Economic evaluation of Clinical Pathway: methods' problems

1. Direct costs/Indirect costs?
 2. Which health care resources do we measure?
 3. How can we evaluate costs?
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AIM of our study

- To assess the potential economic impact of Clinical Pathway's implementation (*Internal Benchmarking*)
 - To compare pathway group with pathway group of different hospitals (*External Benchmarking*)
 - To compare the pathway cost with current charge of Regional Health Care System (next step)
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Clinical pathway for acute management of hip fracture

We want to determine how an evidence-based clinical pathway for treatment of elderly patients with hip fracture could affect health service utilization in two hospitals

- Theoretical cost of clinical pathway
 - Real cost of some patients treated before clinical pathway implementation
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Methods

Clinical pathway

The theoretical cost of clinical pathway is estimated on the basis of consumptions of health care as defined in pathway.

Vs.

Current practice

The cost of standard care is the median cost per patient sustained by the hospital before clinical pathway implementation. Costs are estimated by reviewing medical records.



Selection of patients

We included patients aged 65 years or older admitted to two target hospitals with hip fracture from 1st January 2006 to 30th June 2006, under the following criteria:

1. surgery within 72 hours from admission;
 2. length of hospital stay between 25^o and 75^o percentiles of hospital length stay for hip fracture (in the target hospital in the same period).
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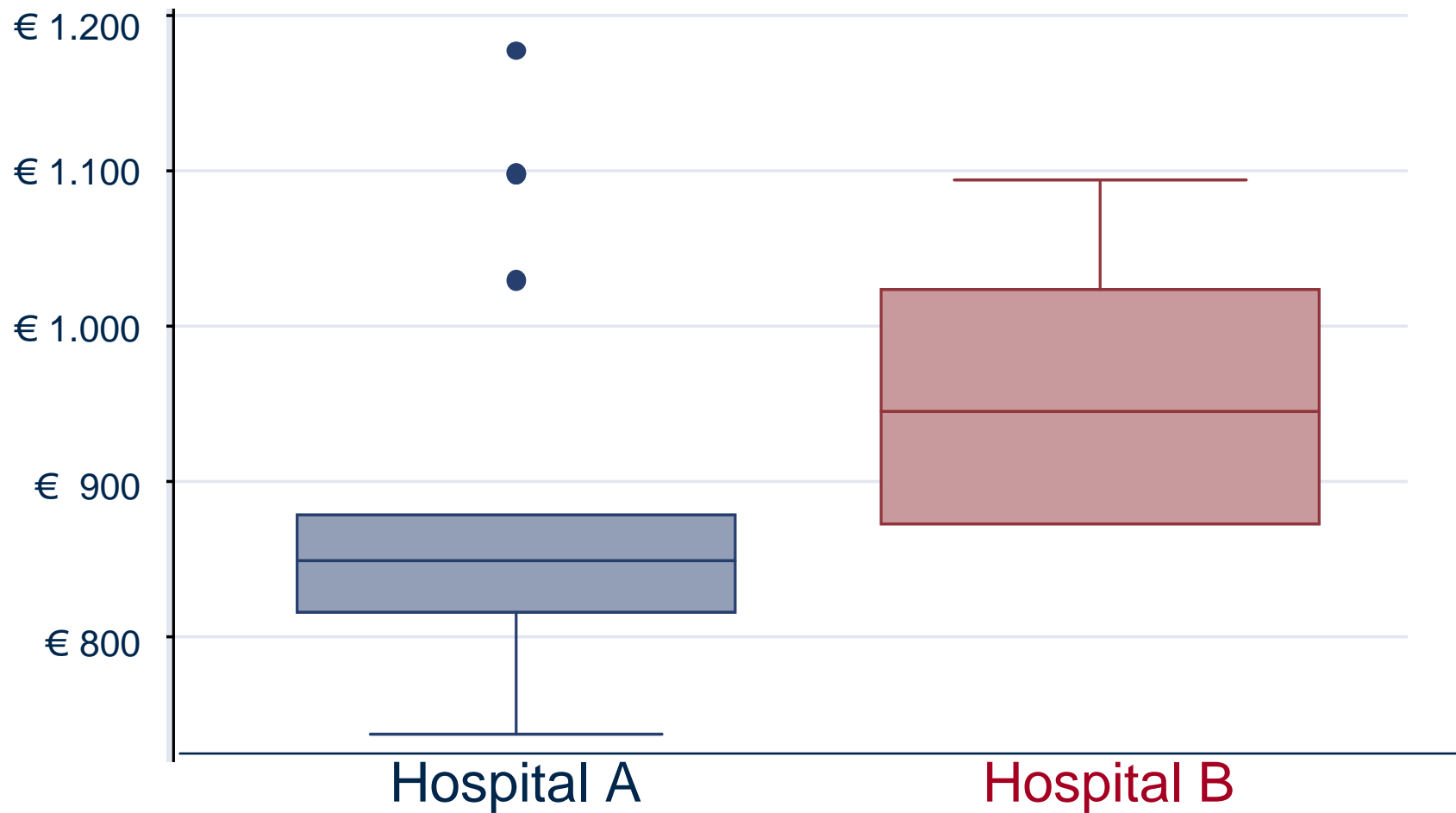
Costs

Direct healthcare costs from hospital's perspective attributable to hip fracture CP were collected.

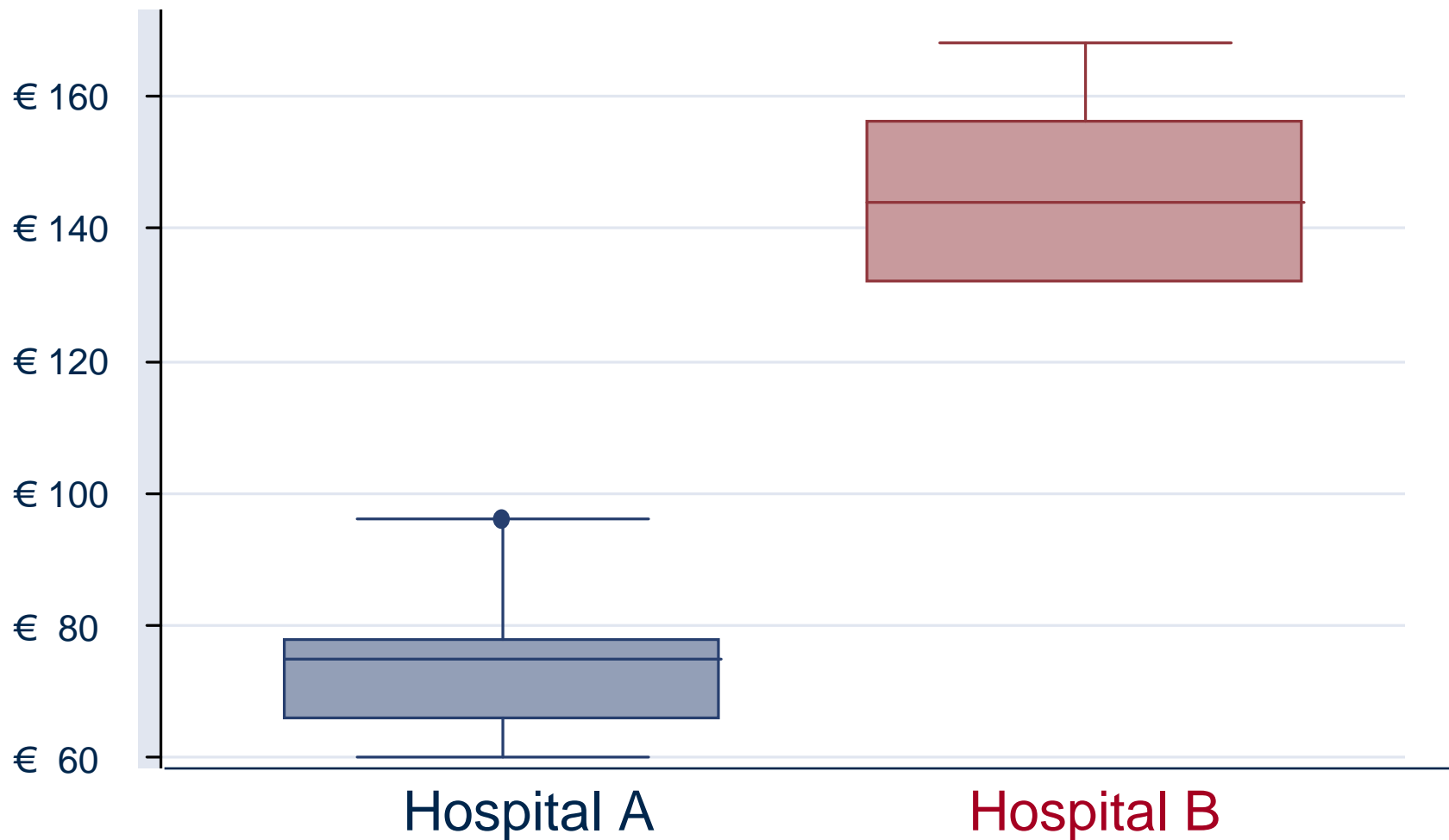
- Treatment
- Laboratory tests and radiologic procedures
- Nursing and medical care
- Prothesis
- Healthcare disposable devices
- Other direct services.

To evaluate these resources, we used hospital billing data for each factor

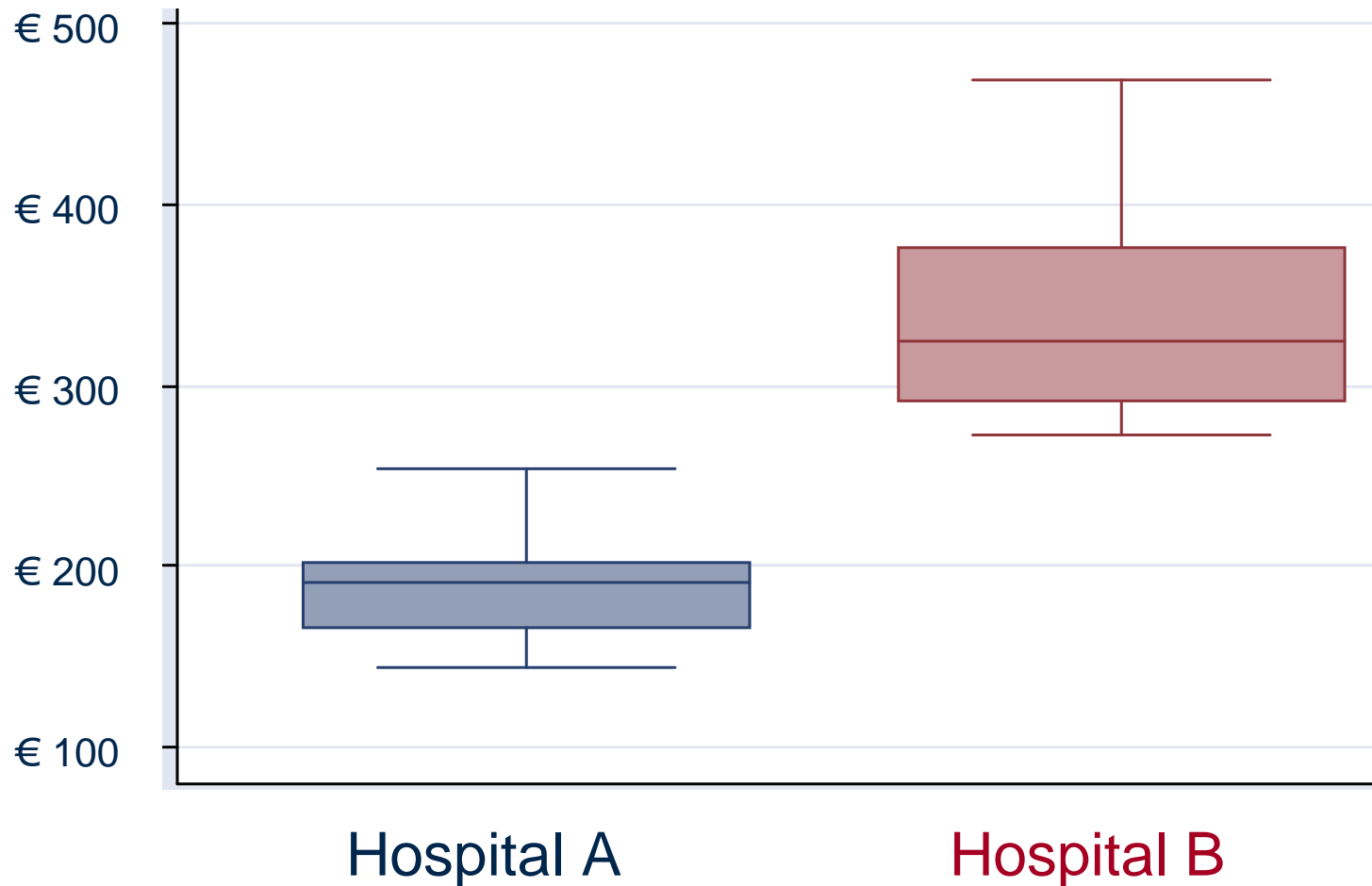
Current practice: *Work's results*



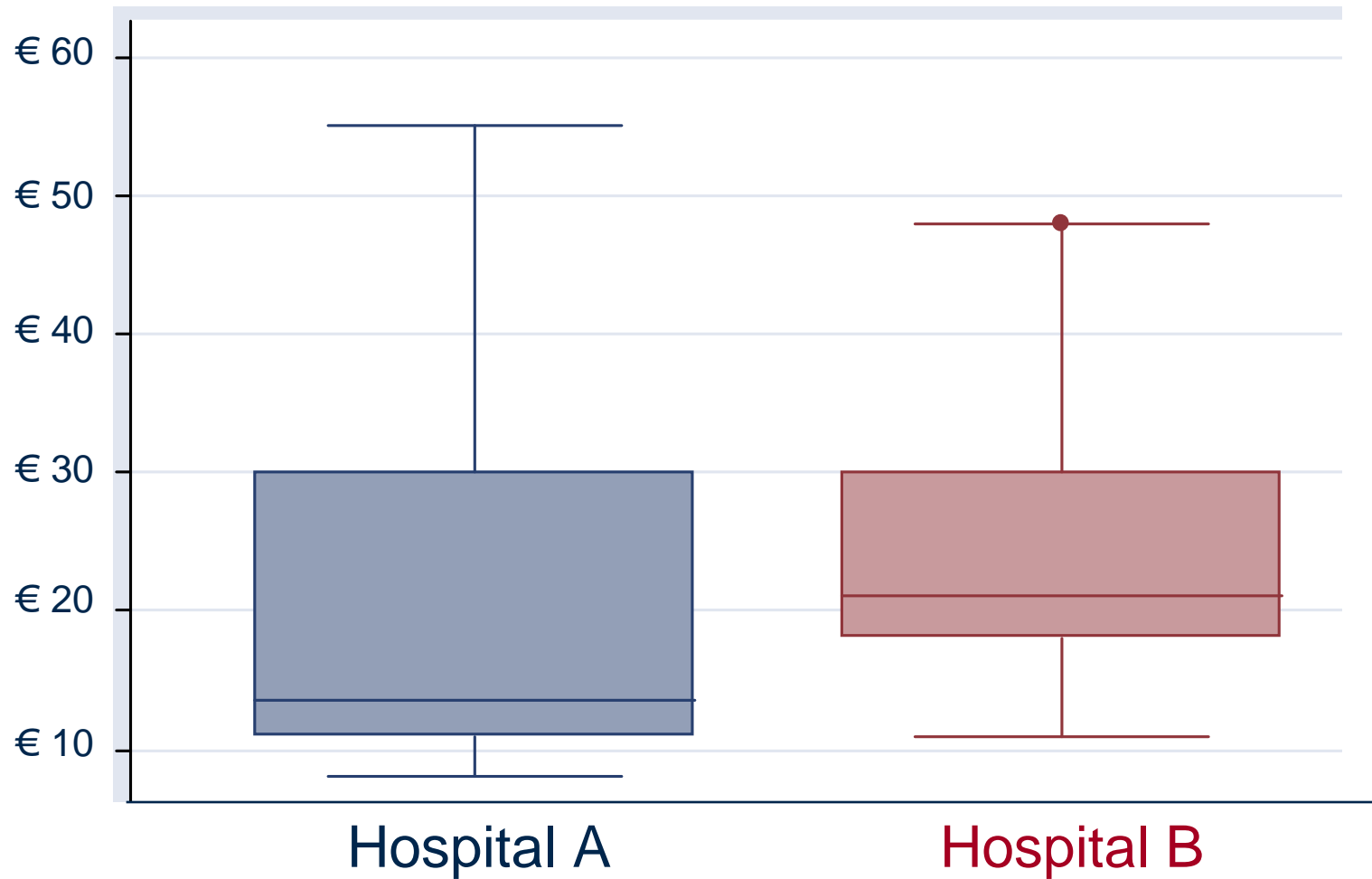
Current practice: *Other services' results*



Current practice: *Procedures' results*



Current practice: *Drugs' results*



Current Practice vs. Clinical Pathway: *e.g. work's results for Hospital A*

	Current practice	Clinical pathway	Δ
Introduction of new recommended activities	€ 20,46	€ 231,72	+€ 211,26
Elimination of non recommended activities	€ 50,56	€ 21,16	-€ 29,40
Reduction of length of stay	€ 808,15	€ 411,39	-€ 396,76

Total - € 214,90

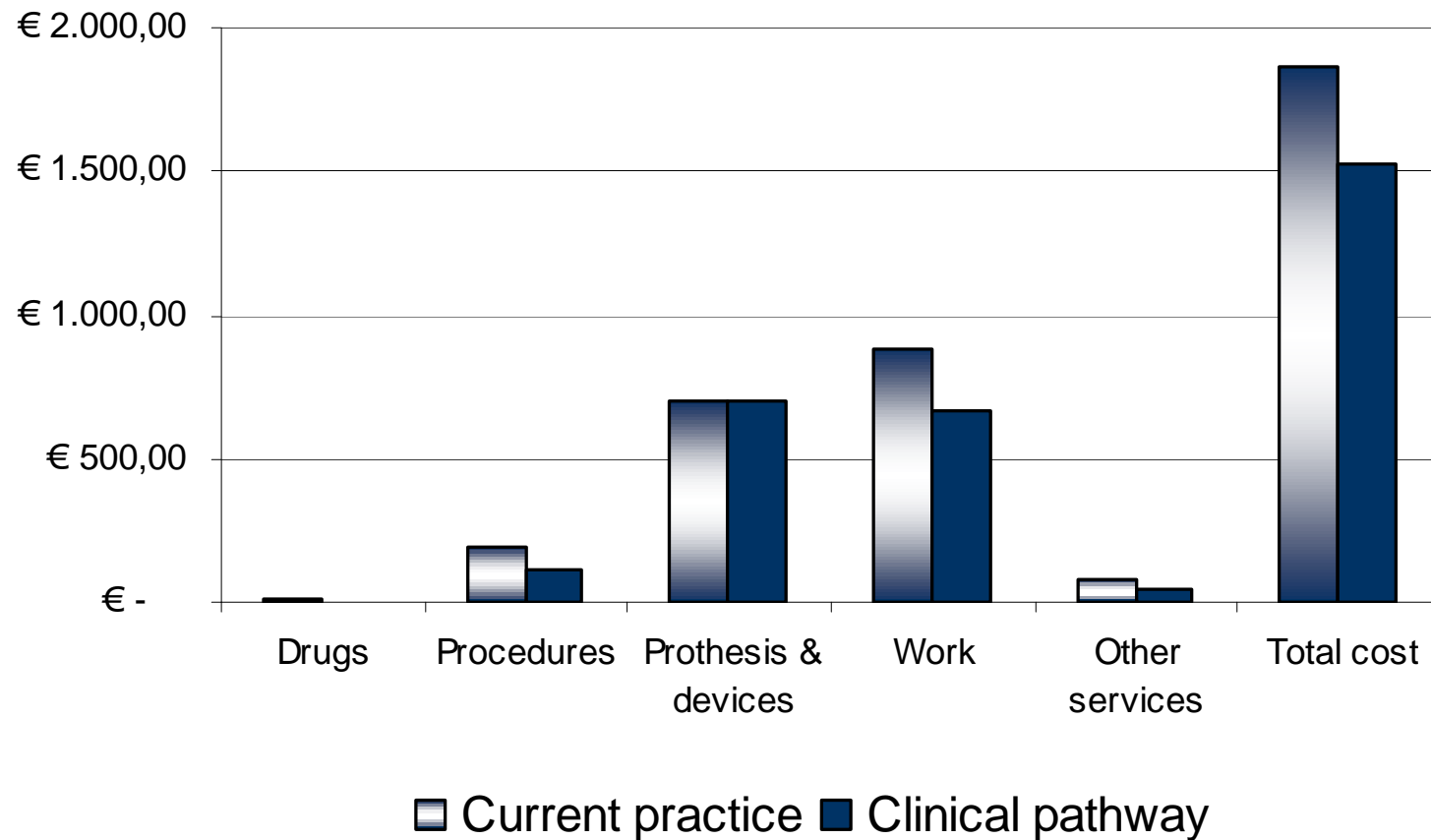
Current Practice vs. Clinical Pathway: e.g. drugs' results for *Hospital B*

	Current practice	Clinical pathway
Antibiotics	<i>Vancomycin+Ciprofloxacin</i> <i>Vancomycin+SMZ & TM</i> <i>X3 days</i>	Cefazolin 1g x 2
	€ 16,44	€ 1,04
Proton pump inhibitors	€ 0,08	€ 0,01
Heparines	€ 5,94	€ 4,50
Pain control	€ 4,47	According to NRS evaluation

Current Practice vs. Clinical Pathway: *e.g. procedures' results for Hospital B*

	Current practice	Clinical pathway	Δ
Radiologic procedures	€ 57,90	€ 54,30	-€ 3,60
Laboratory test	€ 226,00	€ 124,30	-€ 101,70
Others	€ 23,20	€ 23,20	€ -

Current Practice vs. Clinical Pathway: *total costs' results for Hospital A*



Current Practice vs. Clinical Pathway: *total costs' results for Hospital B*

