

Developing a costing methodology and a core dataset of costs for facilitating cross border comparisons in economic evaluation

Jaime Espín^{1,2,3}, Joan Rovira¹, Zuzana Špacírová^{1,2}, Leticia García Mochón^{1,2,3}, David Epstein⁴, Antonio Olry de Labry Lima^{1,2,3}

¹Andalusian School of Public Health/Escuela Andaluza de Salud Pública (EASP)

²CIBER en Epidemiología y Salud Pública (CIBERESP)/CIBER of Epidemiology and Public Health (CIBERESP)

³Instituto de Investigación Biosanitaria ibs

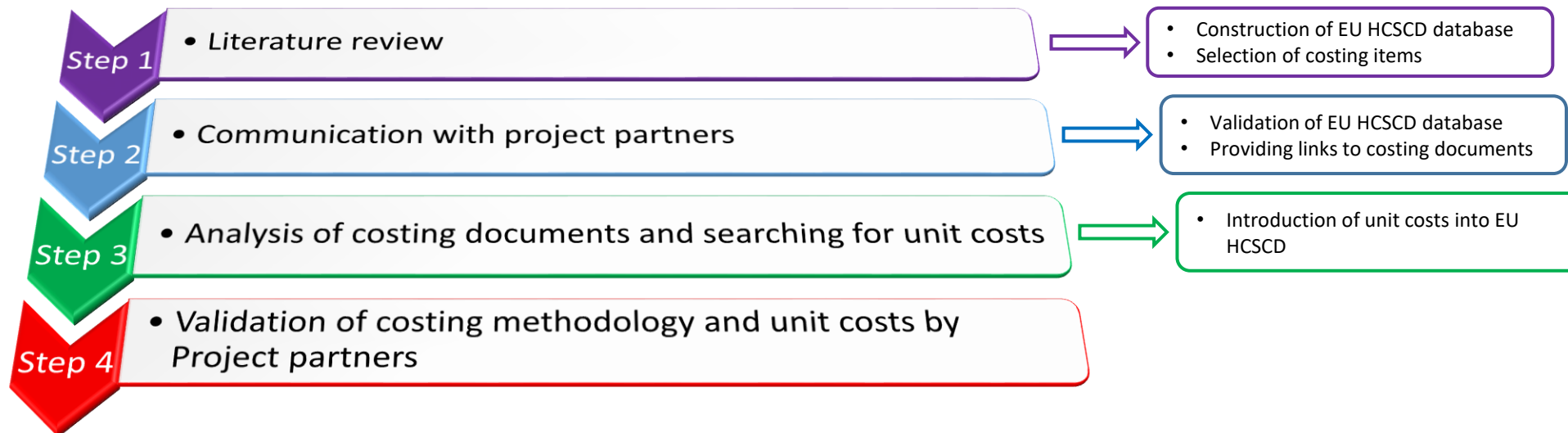
⁴University of Granada



• How does IMPACT HTA contribute to improving the conduct of HTA? What are the gaps it addresses?

- Costs are one of the critical factors for the transferability of the results of economic evaluations. Reusing study results would save a lot of time and thus avoid wasting resources.
- In order to be the EE study of a certain technology carried out in one country **reusable and transferable to other countries**, it is necessary to know what resources are included in the cost calculation.
- To develop an easily accessible and usable minimum common dataset of international costs.

• Methodology



27 costing items organized in 3 main categories and 13 subcategories

Category	Subcategory	Item
Primary resources	Medicines	Paracetamol
		Atorvastatin
		Trastuzumab
	Medical devices	Drug-eluting stent Wearable cardioverter-defibrillator
Health products	Glucose test strips	
	Personnel	General practitioner
		Nurse
		Specialist
Composite goods and services	Outpatient visits	General practitioner visit
		Specialist visit
		Accident & Emergency visit
	Hospitalization	Day of hospitalization at "normal" ward
		Day of hospitalization at Intensive Care Unit
	Image diagnosis	Ultrasound Scan Computerised Tomography Scan
	Laboratory tests	Creatinin Ferritin
	Ambulance services	Non-emergency patient transport Intensive care ambulance
Diagnostic procedures	Colonoscopy	
Therapeutic procedures	Haemodialysis Oxygen therapy	
Complex processes and interventions	Inpatient medical and surgical processes	Heart failure (ICD10: I50) Hernia inguinal, femoral, umbilical (ICD10: K40, K41, K42)
	Day case procedures/ Outpatient surgery	Laparoscopic cholecystectomy Cataract extirpation

Each item contains info on



Item in local language
Item subtype
Code
Model*
Brand*
Country
Region ⁺
Year
Type of unit*
Unit of measurement
Strength*
Number of units delivered
Local price
Local currency
Price in euros
Local price (GDP deflator applied)
Price in euros (GDP deflator applied)
Local price (CPI applied)
Price in euro (CPI applied)
Type of unit value
Type of institution
Source
Bibliographical reference
Notes




*Applies to medicines, medical devices and health products
⁺Applies to only those countries where healthcare costs differ among regions

• **Primary resources**

- Variety of existing brands and/or models
- Difference in monetary values placed on medical devices and health products
- Inclusion/exclusion of VAT
- Personnel costs (elements included: travel, qualifications; worker’s seniority, labour union negotiations, etc.)

• **Composite goods and services**

- Based on DRGs all of them (England), none (Italy, Portugal, Spain and Sweden)
- Publicly available costing documents were often missing

	who is it led by, where it is performed, type of specialist, unit of measurement (visit, team/year, etc.)
	duration, contrast (yes/no), patient’s age, number of areas and type of body scanned, direct access or derived by a GP)
	<i>unit of measurement</i> (journey, intervention, km, patient/year, mobile unit/year, hour), type of service (urban, interurban)

• **Complex services and interventions**

- Organized in DRGs
- May have attributed costs or tariffs (or both)
- Most direct costs and variable overheads are included in costing items of all countries.
- The issue are fixed overheads mainly teaching costs, research costs, depreciation of building and financial costs (included in DRGs in some countries, but not in others)
 - Teaching and research costs are included in Slovenia and very partially in Portugal. Depreciation of building is included in all countries except Germany, Slovenia and Spain. Financial costs are included in England, France, Poland, Portugal and Sweden.

What are the overall impacts in terms of HTA processes, uptake, cooperation etc., and what is the legacy for future research?

- The results of WP3 show the high level of methodological heterogeneity across EU countries when defining the resources and the respective monetary values for estimate costs for the economic evaluation of health interventions. Moreover, there is a lack of transparency in the sources and accounting methods used.
- These facts limits the comparability of health care costs across EU countries, as well as the transferability of economic evaluation studies.
- The products developed by WP3 (and WP4) are intended to overcome these limitations by setting the methodological foundations and a pilot practical tool, the unit cost database, which should ideally be continued and expanded in terms of resources items, countries and regions, updating of observations and methods, etc.
- The database could be the source for national standard costs list, that might further facilitate the transferability of economic evaluations and the opportunities for cross-border research.
- The former tasks could be undertaken by a future international consortium open to all participants in HTA Impact, but also to other interested parties, such as the Pecunia project and to already existing national organisations involved in health care costing in the EU and elsewhere.

Contact details:

- Jaime Espín:
 - jaime@easp.es
 - +34 670 944 108

- Joan Rovira:
 - elrovira@yahoo.com
 - +34 625 279 863

- Zuzana Špacírová:
 - zuzana.spacirova@hotmail.com
 - +34 600 160 806