

COMPARISON THE ANNUAL, NATIONWIDE HEALTH INSURANCE
TREATMENT COST OF HIP OSTEOARTHRITIS BASED ON ROUTINELY
COLLECTED FINANCING DATA IN 2010 AND 2018 IN HUNGARY

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OBJECTIVES

Our aim was to compare the annual health insurance treatment cost of hip osteoarthritis in 2010 and 2018 in Hungary.

METHODS

Data were derived from the financial database of the Hungarian National Health Insurance Fund Administration (NHIFA), for the years 2010 and 2018. Data analysed included annual health insurance costs, patient numbers and cost distribution calculated for age groups and sex. Patients were identified with the following code of the International Classification of Diseases 10th revision: M16.

RESULTS

In 2010, the NHIFA spent 7.60 billion HUF (36.49 million USD/ 27.58 million EUR) on the treatment of patients with hip osteoarthritis, which increased to 13.49 billion HUF (49.93 million USD/ 42.31 million EUR) in 2018 (*Table 1-2-3*). This represents a real value increase of 44 percent over inflation rate. 33.9% of costs was spent on the treatment of male, 66.1% on female patients in 2010, while in 2018 36.8% of costs was invest on the treatment of male and 63.2% on female patients. Acute inpatient care, outpatient care and chronic inpatient care were the main cost drivers in both year. Annual health care treatment cost per patient was 820,812 HUF (3,943 USD/ 2,980 EUR) in men and 921,598 HUF (4,428 USD/ 3,346 EUR) in women in 2010, which increased to 1,156,605 HUF (4,280 USD/3,627 EUR) in men and 1,337,344 HUF (4,949 USD/4,194 EUR) to 2018.

CONCLUSIONS

Between 2010 and 2018 health insurance treatment cost of osteoarthritis increased 44% higher than inflation rate. Acute inpatient care was the major cost driver in the treatment of hip osteoarthritis in both years examined. Distribution of major cost drivers showed a significant difference between the sexes. For 2018, NHIFA's total health insurance expenditure has increased significantly, and the cost per patient has also risen compared to 2010. The average annual health insurance costs per patient was higher for women.

Patient number and health insurance expenditure for hip osteoarthritis by type of care in 2010						
Type of care	Patient number			NHIFA expenditure (EUR)		
	Male	Female	Total	Male	Female	Total
General practitioner care	65,367	148,302	213,669	645,601 €	1,536,579 €	2,182,180 €
Home care	1,241	2,770	4,011	206,658 €	479,390 €	686,048 €
Patient transfer	2,819	7,057	9,876	126,286 €	288,005 €	414,291 €
Rescue	115	235	350			
Outpatient care	65,143	138,933	204,076	1,456,257 €	3,390,328 €	4,846,585 €
Residential care	51	114	165	783 €	1,917 €	2,699 €
Laboratory diagnostics	2,884	5,109	7,993	19,802 €	35,395 €	55,197 €
CT, MRI	928	1,259	2,187	55,629 €	71,316 €	126,945 €
PET	0	0	0	0 €	0 €	0 €
Acute inpatient care	3,140	5,445	8,585	4,834,551 €	7,584,716 €	12,419,267 €
Chronic and rehabilitation inpatient care	2,256	5,711	7,967	1,143,381 €	2,829,814 €	3,973,196 €
Pharmaceuticals	36,623	89,758	126,381	420,532 €	1,071,580 €	1,492,112 €
Medical aids	5,564	12,930	18,494	448,751 €	931,428 €	1,380,179 €
Total	--	--	--	9,358,231 €	18,220,467 €	27,578,698 €

Table 1. Patient number and health insurance expenditure for hip osteoarthritis by type of care (NHIFA, 2010)

Patient number and health insurance expenditure for hip osteoarthritis by type of care in 2018						
Type of care	Patient number			NHIFA expenditure (EUR)		
	Male	Female	Total	Male	Female	Total
General practitioner care	63,551	138,030	201,581	528,699 €	1,164,973 €	1,693,672 €
Home care	2,071	3,644	5,715	352,258 €	654,760 €	1,007,018 €
Patient transfer	2,079	4,952	7,031	166,047 €	362,768 €	528,815 €
Rescue	50	115	165	--	--	--
Outpatient care	69,311	148,375	217,686	2,278,940 €	5,341,397 €	7,620,338 €
Residential care	94	269	363	3,443 €	9,997 €	13,440 €
Laboratory diagnostics	4,999	7,952	12,951	38,138 €	60,071 €	98,209 €
CT, MRI	1,219	1,845	3,064	100,545 €	149,189 €	249,734 €
PET	0	0	0	0 €	0 €	0 €
Acute inpatient care	4,291	6,378	10,669	9,758,396 €	13,652,299 €	23,410,695 €
Chronic and rehabilitation inpatient care	2,356	5,475	7,831	1,275,394 €	2,998,118 €	4,273,512 €
Pharmaceuticals	29,071	68,618	97,689	295,076 €	802,636 €	1,097,712 €
Medical aids	6,924	15,597	22,521	767,380 €	1,553,180 €	2,320,559 €
Total	--	--	--	15,564,315 €	26,749,388 €	42,313,704 €

Table 2. Patient number and health insurance expenditure for hip osteoarthritis by type of care (NHIFA, 2018)

Changes in patient number and health insurance expenditure by type of care between 2010 and 2018						
Type of care	Patient number			NHIFA expenditure (EUR)		
	Male	Female	Total	Male	Female	Total
General practitioner care	-2.78%	-6.93%	-5.66%	-18.11%	-24.18%	-22.39%
Home care	66.88%	31.55%	42.48%	70.45%	36.58%	46.79%
Patient transfer	-26.25%	-29.83%	-28.81%	31.48%	25.96%	27.64%
Rescue	-56.52%	-51.06%	-52.86%	-	-	-
Outpatient care	6.40%	6.80%	6.67%	56.49%	57.55%	57.23%
Residential care	84.31%	135.96%	120.00%	339.87%	421.61%	397.91%
Laboratory diagnostics	73.34%	55.65%	62.03%	92.60%	69.71%	77.92%
CT, MRI	31.36%	46.54%	40.10%	80.74%	109.20%	96.73%
PET	-	-	-	-	-	-
Acute inpatient care	36.66%	17.13%	24.27%	101.85%	80.00%	88.50%
Chronic and rehabilitation inpatient care	4.43%	-4.13%	-1.71%	11.55%	5.95%	7.56%
Pharmaceuticals	-20.62%	-23.55%	-22.70%	-29.83%	-25.10%	-26.43%
Medical aids	24.44%	20.63%	21.77%	71.00%	66.75%	68.13%
Total				66.32%	46.81%	53.43%

Table 3. Changes in patient number and health insurance expenditure by type of care between 2010 and 2018 (NHIFA)

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