

Abstract:

BACKGROUND: Parenteral antibiotic administration in the treatment of periprosthetic joint infections (PJI) often requires inpatient settings. This is associated with significant costs to the healthcare system.

OBJECTIVE: The costs of inpatient parenteral antibiotic treatment (IPAT) and simulated costs of outpatient parenteral antibiotic treatment (OPAT) were compared in patients with PJI. Evaluations were carried out from the perspectives of cost bearers (insurances) and healthcare providers (hospitals).

MATERIAL AND METHODS: The analysis and simulations were performed for all cases with the ICD-10 diagnosis T84 in the treatment year 2015.

RESULTS: The simulated reduction of 159 bed-days in the 12 patients included in the study resulted in a reduction of the total costs of >18,000 € from the perspective of the health insurance. From the perspective of the hospitals the pure proceeds were improved by >22,000 €. The total costs of OPAT were >57,000 € for the health insurance. For hospitals the difference of polyclinic proceeds and costs of OPAT showed a loss of >1500 €.

CONCLUSION: For hospitals the OPAT is overall financially advantageous. Further advantages due to opportunity costs seem to be interesting. For cost bearers OPAT is associated with an additional financial expenditure, particularly due to costs of outpatient medication. The private sector should be considered due to the assumed additional burden as well as the assumed patient comfort.

Reference:

Boese, C.K., Lechler, P., Frink, M., Hackl, M., Eysel, P. and Ries, C. (2020) Cost analysis of inpatient versus outpatient intravenous antibiotic treatment for periprosthetic joint infections : A simulation. *Der Orthopäde*. February 19th. doi: 10.1007/s00132-020-03889-6. (Epub ahead of print). (Article in German).