

CHANGES IN COST REIMBURSEMENT DUE TO THE INTRODUCTION OF DIAGNOSIS-RELATED GROUPS WITH COMMUNITY-ACQUIRED PNEUMONIA

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Objective: Community-acquired pneumonia (CAP) is the most common infectious disease worldwide¹. In Germany, about 1.4 million people are affected by CAP every year. About 200000 cases are hospitalized². The costs related to those patients put considerable strain on hospital budgets. In order to make the hospital cost structures more efficient, a new reimbursement system – the Diagnosis-Related Groups (DRG) – was implemented in hospitals in 2003. This analysis gives an overview of the cost development in the treatment of CAP and of the implementation of DRGs in hospitals.

Materials and methods: A study of disease-related costs of CAP was conducted each in 2003 [study 1 (S 1)] and in 2005 [study 2 (S 2)]. Eleven hospitals participated in S 1, while 14 hospitals were involved in S 2. A total of 641 patients with CAP were documented, 319 of whom participated in S 1. There was no intervention with medical decisions. Demographic data as well as data on the clinical picture and therapy of CAP, and indication-relevant cost data were gathered.

Results: No significant difference between the two studies was found with regard to the demographic data of the patients and the degree of severity of their CAP classified according to FINE (S 1 vs. S 2 each: Category I: 9.7% vs. 8.1%; II: 10.7% vs. 10.9%; III: 19.1% vs. 18.3%; IV: 43.9% vs. 50.3%; V: 16.6% vs. 12.4%). Average duration of hospitalization decreased from 11.46 days (S 1) to 10.80 days (S 2). The average direct costs of CAP treatment increased from €1528 in S 1 to €1,50 in S 2. Thereof, hotel costs were the most cost intensive and fastest growing factor within the 2-year period (S 1: €640 vs. S 2: €909). Medication costs, however, decreased from €201 (S 1) to €136 (S 2). Reimbursement per treated CAP case dropped from €3009 (S 1) to €2778 (S 2).

Conclusions: Within a period of 2 years since DRG introduction, as yet, no cost savings have become apparent from the perspective of the hospital in the treatment of community-acquired pneumonia. The cost-reducing effect of a shorter hospitalization period was compensated by an increase in costs in other areas.

¹Huntemann I, Lorenz J. *Ambulant erworbene Pneumonie (AEP) - Community acquired Pneumonia (CAP)*. BMBF, CAPNETZ, 2004.

²Konietzko N, Fabel H. *Zur Lage und Zukunft der Pneumologie in Deutschland*. In: Thieme G (Hrsg.). *Weißbuch Lunge*. Stuttgart, New York, 2000:25.