

Correspondence

Are Infectious Disease Doctors Better at Caring for Infectious Diseases Than Other Specialists?

TO THE EDITOR—We read with interest the article of Schmitt et al reporting that infectious disease (ID) specialist intervention is associated with decreased mortality and lower healthcare costs [1]. As the result of an order of our institution, the second largest in France, we analyzed, using the French diagnosis related group (DRG) 2007–2008 database, the distribution, length of stay (LOS), readmission ratio, and mortality of patients with an

ID who were cared for by ID physicians in the ID department (IDD) ward vs other medical units [2]. The hospital stay is codified based on the *International Classification of Diseases, 10th Revision* into a DRG which includes associated comorbidity. We first compared mean LOS between IDD and other medical units by an analysis of variance with the type of medical unit as the principal factor, DRG as a cofactor, and their interaction and age of patients as covariates. Then, we compared LOS between types of medical units by DRG class using test of effect sliced based on least squares means. The

number of saved days of care was converted to save DRGs and to cost, according to the French national database 2007. The readmission of patient for the same DRG within 30 days of discharge and the mortality in the DRG within the time of care were analyzed by using logistic model with type of medical unit and age as effects. Age-adjusted odds ratios (ORs) and 95% confidence intervals (95% CIs) were calculated. Of the 4188 hospital stays, 1059 were provided by the IDD and 3129 by other medical units, indicating that the IDD cared for 25% of the ID DRGs (Figure 1). Despite

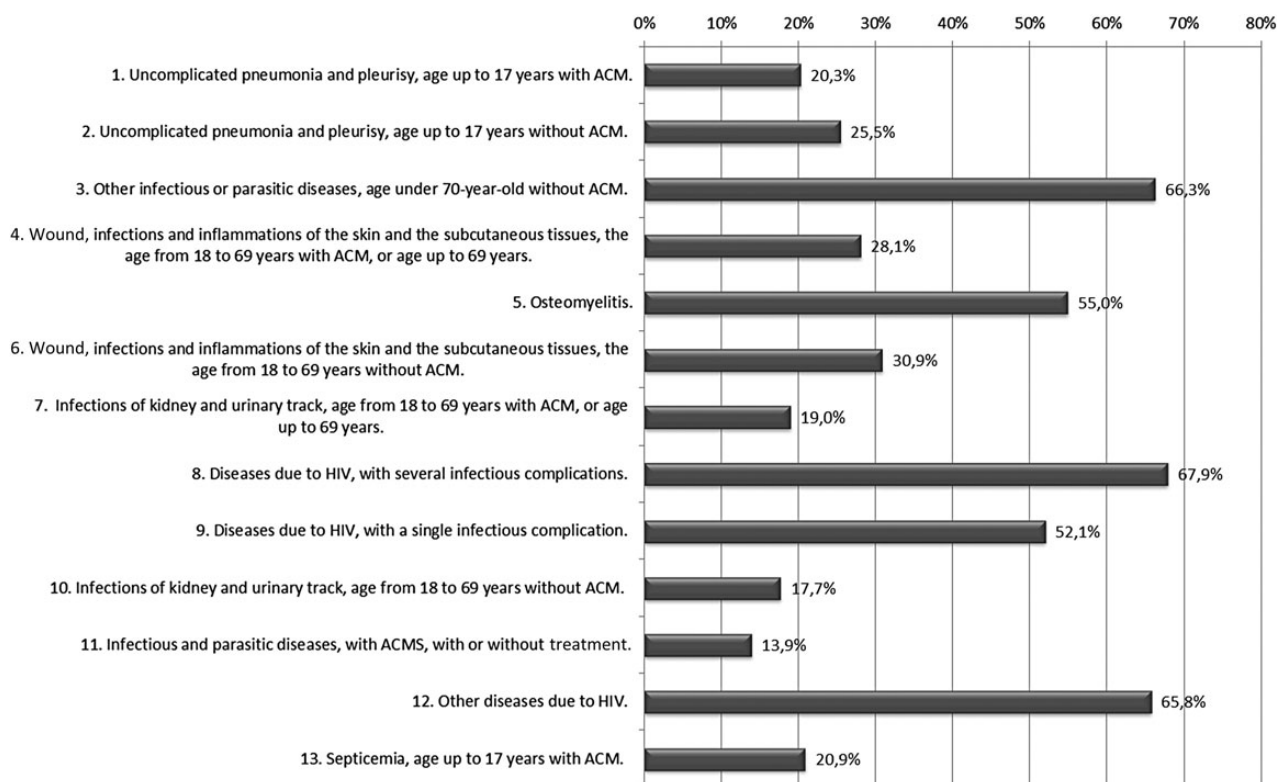


Figure 1. Proportion of the most prevalent diagnosis related group related to infectious diseases cared for in the infectious disease department, compared with other medical units of the hospital (%). Abbreviations: ACM, associated comorbidity; HIV, human immunodeficiency virus.

the fact that age and the DRG significantly influenced the LOS ($P < .0001$), the mean LOS was still significantly shorter in IDD than in other medical units (8.5 ± 7.5 days vs 10.3 ± 10.3 days, respectively; $P = .037$). The LOS of pneumonia without associated comorbidity was significantly shorter when patients were cared for in IDD than in the pneumology or the internal medicine department (mean, 6.5 ± 4.4 days/ 7.7 ± 5.4 days/ 9.8 ± 7.9 days, respectively; $P = .0052$ by analysis of variance). The mortality rate was significantly lower in the IDD compared with other departments (1.9% vs 5.7%, respectively; OR adjusted for age = 2.4, 95% CI, 1.4–4.0, $P = .0016$), whereas no difference was observed on the readmission ratio. If care for these DRGs had been provided by the IDD, the French national insurance would have saved €1 426 298, pneumonia and osteomyelitis representing 72% of the total money saved. Finally, only a low proportion of patients with suspected or confirmed ID are cared for in IDD, explaining the development of ambulatory care by itinerant ID physicians [3]. We provide up to 5000 ID consultations a year in other medical units, and according to Eron [4], this may have underestimated our data. In this study, IDs are mostly community-acquired [5] and were treated in IDD ward, a situation different from that reported by Schmitt et al [1], confirming in another way the effectiveness of specialized care. Other complementary studies are welcome to strengthen these data.

Notes

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