

4<sup>th</sup> World Congress on

## PUBLIC HEALTH, EPIDEMIOLOGY &amp; NUTRITION

May 24-25, 2018 Osaka, Japan

**Incentives to reduce nosocomial infections: A matter of economics and statistics****Jean-Pierre Marissal**

Hospital Group of the Catholic Institute of Lille, France

**Background:** There is a growing political will to link hospital payments not only to the severity and complexity of the cases treated, but also to the ability of a structure to meet some objectives regarding public health or cost cuts. One possible and legitimate objective appears to be the performance about the prevention of nosocomial infections.

**Objective:** We analyze the ability of DRG-based payment systems to help defining financial incentives or penalties, about both their economic and statistical feasibility.

**Method:** We assess the theoretical and empirical evidence for the possibility of payment/reward systems aimed at reducing the incidence of nosocomial infections, based on an analysis of the costs involved by such infections for hospitals in both terms of productivity and opportunity losses or gains. We use the case of *Clostridium difficile* infections as an illustration of the dilemma involved in the task of incentivizing hospitals to prevent nosocomial infections.

**Result:** There is room for the definition of payment/reward systems based on the definition of criteria related to the productivity gains/losses, based on DRG-payment systems and the estimation of opportunity costs involved. However, we show that the main problem we are facing is related to the assessment of the impact of the nosocomial infection on the duration of hospital stay at the individual level.

**Conclusion:** The methodological stalemate involved in the definition of payment/reward systems, as shown by the analysis of a particular situation with general implications, calls for the definition of some academic consensus or common minimum standard of estimation of such a crucial data that is the measurement of the individual extra lengths of hospital stay.

**Biography**

Jean-Pierre Marissal is working as a Health Economist at the Lille Catholic University, France and the depending hospital structures. He is also a Lecturer of Microeconomics at the same academic institution.

jean-pierre.marissal@univ-catholille.fr

**Notes:**