

Financial impact of including dentists in UCIs for reducing cases of Nosocomial Pneumonia

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It is a study of Financial Impact Analysis, where the financial consequences arising from the possibility of inclusion of the dentist in the Intensive Care Units (ICU), within the reality of the Unified Health System (SUS), were evaluated in Brazil. It was based on a quick review of the literature and economic evaluation with reference to the year 2018. Information on costs and hospitalizations were collected from the official databases of the Ministry of Health, the Federal Council of Medicine and the Union of Dentists of the State of São Paulo. Only the direct medical costs related to the hospitalizations were calculated. Scenarios were simulated for a time horizon of 1 year (2018) and a sensitivity analysis was made for a more optimistic scenario (values 20% lower) and another less optimistic (values 20% higher). On average, the presence of a dentist in the ICU reduces the development of pneumonia cases by 56% and 8.18 days, which represents a savings of 34.92% in hospitalization costs in the evaluated scenario. In Brazil, when hiring dentists in all ICUs, each avoided case would contribute to savings of R\$ 7,949.45 (1US\$ = R\$ 4,02 in 30/10/2019), ranging from R\$ 6,359.56 to R\$ 9,539.35 in the

optimistic and pessimistic scenarios, respectively, where each case avoided is higher than the dentist's monthly salary. It would be necessary to spend R\$ 142,060,140.00 on hiring the dentist to cover the ICUs, making the final savings more than 865 million reais. It is concluded that the inclusion of the Dental Surgeon (DS) in ICU teams would have a positive economic impact, with savings in hospitalization costs from the perspective of SUS. The COVID-19 pandemic in Brazil, depending on the State's action in containment strategies, could require 2.17 times more in the best of scenarios where the action of total suppression would be used. Such a situation requires emergency measures, and the role of the dentist is a strategy that can support the health system.

Key messages:

- Dental care in the ICU is an important and cost-effectiveness strategy for the control of microorganisms that act in the evolution of the pneumonia nosocomial.
- Such a situation requires emergency measures, and the role of the dentist is a strategy that can support the health system.