

COST-EFFECTIVENESS ANALYSIS OF VOCATIONAL TRAINING IN FAMILY MEDICINE IN RIO DE JANEIRO

Authors: (1) Adelson Guaraci Jantsch, Brazil, State University of Rio de Janeiro; (2) Antônio Carlos Ponce de León, Brazil, Professor of Statistics and Epidemiology at State University of Rio de Janeiro.

CONTEXT - From 2008 until 2016 Rio de Janeiro promoted a comprehensive Reform of its Primary Health Care (PHC) system, building new primary care (PC) clinics, and increasing the coverage of the Family Health Strategy from only 3.5% to 70%. As part of these structural changes, the Health Department invested financial resources to support vocational training in Family Medicine (FM) as a strategy to workforce development and a way to improve the quality of care delivered.

OBJECTIVE - To show the effect of vocational training in FM on the better use of health resources by comparing the differences in terms of resources spent by Family Physicians (FP) and Generalists through the 30 most commonly ordered blood tests.

METHODS - A longitudinal retrospective analysis through a panel data study having a sample of 550,000 patients treated in the PC clinics in Rio de Janeiro from 2013 to 2018. Patients treated by trained FP were compared to those treated by non-FP physicians (generalists) and the risks for having a blood test ordered were estimated using a Poisson regression model adjusted for age, sex and morbidities. The Incidence Rate Ratio comparing the risks between FP and Generalists was estimated. With the cost of every blood tests, a direct standardization method estimated the amount of money that could be saved if all physicians in PC were trained FPs.

RESULTS - A FP spends US\$ 164.88 (CI=133,88; 195,88) in 100 consultations while a Generalist spends US\$ 32.91 (CI= 30.58; 35.23) more for the same amount of patients. Within the sample studied, there were 45.066 consultations in a month and if all physicians were FPs, US\$ 16,908 could be saved—the equivalent cost of a family health team taking care of 4,000 people for a month.

CONCLUSIONS - Vocational training in Family Medicine is effective to promote better use of resources, and saving money for the health system. This has implications for health managers and policy makers but also for patients, who will be less exposed to unnecessary procedures, decreasing their chances of adverse effects, over-diagnosis and over-treatment.