Research Improves Hospital Efficiency, Length of Stay, Healthcare Costs

According to a study by Universidad Carlos III de Madrid (UC3M) and the IE Business School, public hospitals that generate more scientific publications are more efficient at attending patients. Findings of the study are published in the journal Research Policy.

Study researchers also analysed the reduction in health care costs that could be associated with scientific production in medicine and surgery. They used the Ministry of Health database consisting of results from 189 Spanish hospitals over more than ten years. They then measured the impact on length of hospital stays.

Findings show that both basic and clinical research have a positive impact on the efficiency of a hospital. Overall, it was observed that hospitals that are able to produce more knowledge in the form of scientific publications end up being better hospitals in diagnosis, treatment and surgery.

They also contribute to a reduction in the length of hospital stays. Álvaro Escribano, full professor in the UC3M Department of Economics and one of the study researchers points out that in Spain, each day of hospital stays costs approximately 660 euros per patient annually. Reducing hospital stays can thus translate into significant reduction in healthcare costs. The message is thus simple: hurting research can have a great impact on global health care costs.

The researchers analysed the impact of R&D on the sustainability of the National Health System through the cost reduction that could be achieved through reduction in the length of hospital stays. As Antonio García-Romero, professor at the IE Business School highlights, increase in scientific production could reduce health costs by around 1%.

Researchers also point out other factors that could have an impact on the efficiency of hospitals. These include characteristics, human resources, diagnostic activity, investment and capacity to absorb knowledge. They recommend that efforts should be made to promote research, especially basic research as this could have significant impact on the medium and long term efficiency of the hospital and a reduction in healthcare costs. In addition, the earlier patients recover, the earlier they will return to work and this in turn would increase total labour production.

Source: [Universidad Carlos III de Madrid - Oficina de Información Científica](https://www.uc3m.es/)  
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