

14th Annual Meeting of the International Society of Technology Assessment in Health Care (ISTAHC). Ottawa, Canada, 1998.

Economic analysis of Hospital Libraries in Spain

Cristina Sánchez, Pablo Lázaro*, José M Estrada, María A Poza.
Health Services Research Unit, Institute of Health Carlos III, Madrid, Spain

Abstract

Objective: To analyze the costs of public hospital libraries in Spain.

Methods: Cross-sectional descriptive study by survey in public hospitals with more than 100 beds, or smaller hospitals with teaching accreditation. Subjects were included in the study if they met the following operative definition of *library*: “Organized collection of books and periodicals in the health sciences, with at least one person who facilitates the use of such documents in a specific physical area.” A self-administered questionnaire was sent to identify the study population and follow-up was carried out by phone. Data collection was completed in January 1996. Information on costs refers to 1994. Linear regression techniques were used to study the association between library cost, teaching status and number of hospital beds. For libraries which did not respond to the questionnaire, costs were assigned by extrapolating the mean cost for each item of the libraries which did respond, adjusted by number of beds and hospital teaching status. A sensitivity analysis was carried out to explore the effect of varying uncertain parameters on the results.

Results: Of the 314 hospitals identified, 211 (67.2%) have a library, 169 of which answered the questionnaire (response rate: 80.1%). The total costs of the 211 hospital libraries were \$22.8 million for the baseline case (\$US1 = 133.94 pesetas in 1994), ranging from \$20.3 million (most favorable case) to \$25.4 million (least favorable case). The 169 libraries that answered the questionnaire account for 83.8% of the costs, and the remaining costs are extrapolated. Fixed costs represent 94.8% of total hospital library expenses, while variable costs make up 5.2%. The largest fixed-cost items are personnel (38.3% of the total) and subscriptions to periodicals (28.9%). Telephone expenses account for 77% of the variable costs. In the 140 teaching hospitals an association was seen between number of beds and library costs which fits the following linear regression model: $Y (\$) = 182.6 (\$/\text{bed}) \times X (\text{beds}) + 32,483 (\$)$, ($R^2 = 0.60$; 95% confidence interval for the X coefficient: (157 - 208), where Y = total costs and X = number of beds. No significant association is seen in the 29 non-teaching hospitals ($R^2 = 0.03$; $p = 0.66$). The mean cost of a hospital library is \$108,281 (SD \$87,345). The large variation in costs depends mainly on the number of beds and teaching status of the hospital. The costs of public hospital libraries in Spain represent 0.08% of the nation's public expenditures on health.

Conclusions: One third of public hospitals do not have a library. The total cost of hospital libraries represents a small proportion of total public expenditures on health. In teaching hospitals a direct association exists between number of hospital beds and library cost. This fact may indicate that teaching hospital characteristics have contributed substantially to the configuration and role of public hospital libraries in Spain.

* Current address: Pablo Lázaro. Técnicas Avanzadas de Investigación en Servicios de Salud (TAISS).
Cambrils 41-2, 28034, Madrid. Spain. E-mail: plazaro@taiss.com.