

ABSTRACT

Cost functions are the relationship between the input prices and the output for a firm. Empirical testing is however not very clear-cut. This is because various other factors which are beyond the control of a firm can also influence the cost functions. Problems are compounded in case of estimation of hospital cost functions due to the difficulty of defining hospital output, specific inputs (department wise) and lack of availability of data from secondary sources particularly for developing countries. This paper makes an attempt to construct the hospital cost function using primary data collected from 8 public hospitals in Bangalore by employing the Stochastic Frontier Estimation (SFA) method – an exercise hitherto not carried in India. Specifically, this study tried to capture the inefficiency of hospitals by specifically measuring the cost efficiency after controlling for factors which have a significant influence on the costs. We also tested the stochastic frontier hypothesis and checked for any inefficiency if it exists and the factors which cause this inefficiency. Time varying inefficiencies were also captured in this study.

All the input variables played a significant role in determining hospital costs. Technology had a significant impact in determining the cost of the hospital with the cost inefficiencies increasing over the years due to more and more expensive technology. The sample also indicated existence of economies of scale.