

Methodological approach and theoretical concept for measuring hospital technical efficiency

ABSTRACT

Background: In the health care systems, efficiency measurement is considered as a key step in performing individual performance audits of production units such as, health centres and hospitals. It entails a rational framework through which resources are distributed and shared among health care facilities. Thus, there are two common approaches to measure hospital efficiency namely: non-parametric (DEA) and parametric (SFA). The article is aimed to review the articles to analyze the characteristics of these approaches and to identify the similarities, differences, strengths, and limitations related to them. Materials and Methods: The literature, which related to measuring relative efficiency of hospitals were obtained from online database involving ScienceDirect, Pubmed. The keywords used for the search terms involving hospital efficiency, healthcare efficiency, parametric approach, non-parametric approach, DEA and SFA. The review only for articles published in English language. Result: The required information about methodological approaches were obtained and summarized into the construct form. The discussion was based on approach type in term of non-parametric and parametric. Conclusion: In a nutshell, both of DEA and SFA can be applicable in healthcare setting to measure hospitals efficiency. The selection of the convenient approach is subjected to the aim of the study.

Keyword: Methodological approach; Non-parametric; Parametric technique; Hospital efficiency