A Patient-based Hospital Referral Decision Support System

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Abstract

In this study, an electronic referral system was developed for general practitioners to send referrals electronically to providers. The electronic referral system aims at improving referral decisions by involving patients in the process. A database of hospital services in Lagos metropolis was developed and hospitals distance information were retrieved and computed using Google map. A provider selection model that uses a multi-attribute decision making function was adapted and implemented. The provider selection model selects optimal provider based on patients and providers determinants which contained fourteen criteria for referral decision. In the system’s output, hospitals were ranked by computing the average between provider and patient feedback factors, this differs from existing systems as the implemented system shows how introduction of patient participation can affect recommended hospitals. In conclusion, the result of this work is expected to improve referral decision support and patient participation.

References


Index Terms

Computer Science

Information Sciences

Keywords

E-Referral; decision support system; patient-based.