Abstract

Rankings have a great value in providing necessary information to take the appropriate decision in various fields. In the healthcare sector, ranking systems have a vital and important role in the development of each hospital. The aim of this paper is to design mathematical ranking model based on quantitative parameters and sub parameters using quality function deployment to rank the computed tomography (CT) departments in hospitals. The proposed model is based on parameters extracted from both the hospitals and the CT scan devices. The output of the system from 30 different hospitals has been compared with experts’ opinions showing an average error of 2.04 % ±1.9%.

References

2. D. G. Pope, "Reacting to rankings: evidence from “America's Best Hospitals”," Journal of
34. C. G. Mayhall, Hospital epidemiology and infection control: Lippincott Williams & Wilkins, 2012.

Index Terms

Computer Science

Applied Sciences

Keywords
Ranking, computed tomography (CT), QFD