The medical environment is influenced deeply by the policy of health insurance now, so the effective distribution of resources, promoting medical service quality and increasing patient loyalty are the important topics in the hospital management. Although hospitals in Taiwan carry on the satisfaction investigation to the patients regularly at present, the relations between the items in the questionnaire are not discussed for most of them. But DEMATEL questionnaire can study the relations between the items.

We will apply importance-performance analysis and DEMATEL method to evaluate the quality of medical services. First, the questionnaires of this research are based on PZB, we try to find the major strengths and the major weaknesses by importance-performance analysis method. Then we set up a DEMATEL questionnaire for the major strengths and the major weaknesses, respectively. For the vagueness in DEMATEL questionnaire, we need the fuzzy DEMATEL method to analysis the data. Case study of a hospital in the center district is carried on for testing the suitability of our proposed model. The results can suggest that the major strengths of the hospital can be maintained and the major weaknesses of the hospital can be specifically improved. Then the quality of medical service for the hospital will be enhanced in the future.

Keyword: Fuzzy DEMATEL, importance-performance analysis, medical service quality