

عنوان مقاله:

Design of a Reliable Facility Location Model for Health Service Networks

محل انتشار:

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خلاصه مقاله:

This paper proposes a novel facility location model for health service network design by considering different key elements including the reliability aspects, service capacity, congestion, service quality, surrounding public infrastructures, geographical accessibility and several types of cost such as investment, transportation and operational costs. We formulate the problem as a robust scenario-based stochastic programming model to deal with different categories of uncertainty associated with reliability, demand, service and geographical accessibility such that the minimization of expected costs under all disruption scenarios will be attained. To illustrate the applicability of the proposed model, a real-life case study based on the health service network of Sistan and Baluchestan province is presented. The findings of this research enable the system designers to investigate different strategic and operational decisions in the design and management of the health service networks from both cost and risk perspectives

کلمات کلیدی:

Facility Location, Health Service Network, Reliability, Congestion, Accessibility, Robust Optimization

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