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A System Dynamics Model for Analyzing Customer Satisfaction in Healthcare Systems

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Abstract : Health organizations' sustainable development has nowadays become highly affected by customers' satisfaction due to significant changes made in the business environment of the healthcare system and emerging of Competitiveness paradigm. In case we look at the hospitals and other health organizations as service providers concerning profit issues, the satisfaction of employees as interior customers, and patients as exterior customers would be of significant importance in health business success. Furthermore, satisfaction rate could be considered in performance assessment of healthcare organizations as a perceived quality measure. Several researches have been carried out in identification of effective factors on patients' satisfaction in health organizations. However, considering a systemic view, the complex causal relations among many components of healthcare system would be an issue that its acquisition and sustainability requires an understanding of the dynamic complexity, an appropriate cognition of different components, and effective relationships among them resulting ultimately in identifying the generative structure of patients' satisfaction. Hence, the presenting paper applies system dynamics approaches coherently and methodologically to represent the systemic structure of customers' satisfaction of a health system involving the constituent components and interactions among them. Then, the results of different policies taken on the system are simulated via developing mathematical models, identifying leverage points, and using scenario making technique and then, the best solutions are presented to improve customers' satisfaction of the services. The presenting approach supports taking advantage of decision support systems. Additionally, relying on understanding of system behavior Dynamics, the effective policies for improving the health system would be recognized.

Keywords : customer satisfaction, healthcare, scenario, simulation, system dynamics
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