MEDICAL CARE SIMULATION: A STUDY UTILIZING DYNAMIC SIMULATION MODELING

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Development and implementation of a dynamic computer-aided simulation model of the Family Practice Units Network affiliated with the University of Toronto is discussed. The medical network is conceptualized in an industrial dynamics framework, as a system of interacting flows of patients, medical staff, capital assets, information, and money.

Given a patient demand for medical care, the model will process patient's allocation, hire staff, accumulate capital assets and generate expenditures.

The model is used to develop an understanding of the dynamic behaviour exhibited by the different family practice teaching units, and will predict the dynamic consequences of variations in family and community health care policies.