

**SIMULATION MODEL OF A MULTIPHASIC SCREENING UNIT
FOR USE BY A DEPARTMENT OF SURGERY**

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Increased emphasis has been placed on the utilization of automated multiphasic screening units as a means of contributing to the improvement of health-care delivery. This paper describes the application of a GPSS program to evaluate such a unit for use by a surgical service. By using the simulation model, statistics on the efficiency and utilization of the unit are obtained and compared with real-world data. Variations in patient scheduling and processing made within the model assist in the determination of the most effective use of fixed health-care personnel and facilities. Based upon model-generated data, predictions can be made about personnel and facility capacities required to cope with the increasing demands projected for services in the hospital. Application of a simulation model to the planning, analysis and implementation of a multiphasic screening unit can lead to economic benefits and efficient service for patients and physicians.