

## **Mobile Patient Project**

**Research Director:** Nalin Kulatilaka

**Key Researchers:** John Henderson, Eugene Litvak

**Academic Partners:** Boston University

**Industry Partners:** Lucent Technologies, Various others to be determined

**Project Team:** N. Venkatraman, Nalin Kulatilaka, C.B. Bhattacharya, Michael Swartz, G. Shankaranarayanan

### **Abstract:**

Health care systems today operate at maximum capacity. It is not unusual to find patients with sophisticated equipment queued up in the hall awaiting an empty room or service facility. In such environments, the slightest delay quickly propagates to adjacent service centers. The result is a classic "traffic jam". Service time degrades, long lines develop and frustration on the part of both the patient and the health care professional soars. There are now several major research initiatives that seek solutions to this problem by focusing on ways to reduce process variability. This project builds on this work by exploring how perfect information on patient location and movement can enable the provider to dynamically reallocate resources (both staff and physical facilities) to dramatically improve service quality. The project will proactively introduce patient location systems in hospitals to test the impact of patient location information on process effectiveness. Currently, two hospitals in the Boston area have indicated a willingness to partner as experimental test sites.