Abstract

Process Reengineering for Improved Patient Care at the Accident and Emergency Department of QEH, Barbados

Objective: To determine the quality of service currently being provided by the Accident and Emergency Department and to use Process Reengineering for designing methods to improve the quality of service provided by Accident and Emergency Department.

Materials and Methods: This study looked at three constituents of Process reengineering, namely Time Motion Analysis, Customer Value Structure and Patient Satisfaction.

Time motion analysis was performed in the Accident and Emergency Department to determine the average interaction times and the waiting times, for various stations of the patients' throughput. This study was conducted over one week starting November 6, 2003. Continuous data collection was done for all patients during the study period. Trained Research Assistants were used for this data collection process.

Customer value structure was studied for all the stakeholders of the Accident and Emergency Department. These stakeholders were interviewed to determine the factors they consider important in

assessing the functioning of any Emergency Department. At this stage, a total of 42% nurses, 64% doctors and 54% support staff were interviewed. In the next phase, the stakeholders were interviewed again. Next, they were asked to rank these identified factors. They were also required to rate how well they thought the Accident and Emergency Department performed for each of these factors. At this stage, 62% nurses, 68% doctors and 57% support staff were interviewed.

Patient satisfaction survey was conducted over the telephone, using a custom designed questionnaire. All patients who attended the A&E between November 2, 2003 and November 5, 2003, were targeted.

Results: Data from a total of 675 patients were used in the Time Motion Analysis. It showed significant waiting times at various stages of the patients' throughput. All the waiting times were found to be considerably longer than internationally accepted benchmarks.

The Customer Value Structure identified significant performance gaps in the Accident and Emergency Department. Stakeholders felt that the waiting times were particularly long and should be reduced considerably. Similar results were obtained for staffing, ancillary service turn around time and triage.

In the Patient Satisfaction study, a total of 342 persons were interviewed. Patients, in general, seemed to be satisfied with various aspects of the Accident and Emergency Department. The one aspect of major concern to the patients was prolonged waiting times.

Conclusion: This study identified significant deficiencies that exist in the Accident and Emergency Department at present. The principal shortcoming noted was prolonged waiting times. Other deficiencies identified in this study were long turn around time for ancillary services, inadequacy of the present triage system, staff shortages, and prolonged waiting times after admission.

This study also recommends methods to overcome these deficiencies and thereby offer better service to the patients.

Keywords: Process Reengineering, Accident and Emergency Department, Time Motion Analysis, Customer Value Structure, Customer, Stakeholder, Patient Satisfaction, Triage