



Zero Waiting Time at the Emergency Room



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Abstract

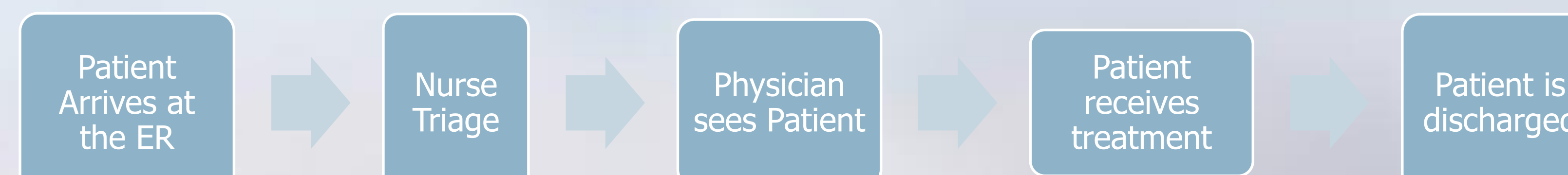
Long waiting times at the Emergency Rooms are a problem that affect every hospital in Puerto Rico. The main causes of this problem are the lack of patients understanding the purpose of the ER and the inefficient use of the personnel throughout the process or workflow of the Emergency Department. The processes in three Emergency Rooms were studied in an effort to reduce waiting times. It was found that by creating a shorter process of categorization, integrating the end of a process with the beginning of the next one, informing the patient of the process and its purpose, a zero waiting time for patients that arrive at the Emergency Room is possible.

Introduction

One of the biggest challenges facing any Hospital's Emergency Room in Puerto Rico is minimizing the waiting time of the patients. Over the years more, and more patients are relying on the use of an Emergency Room (ER) to receive all sorts of treatments and this has caused an overflow of patients in the waiting rooms. All these factors, combined with the fact that every hospital is acquiring an Electronic Health Record system, are guaranteed to affect even more the wait time of patients. For the purpose of this research three different ER were evaluated and studied.

Problem

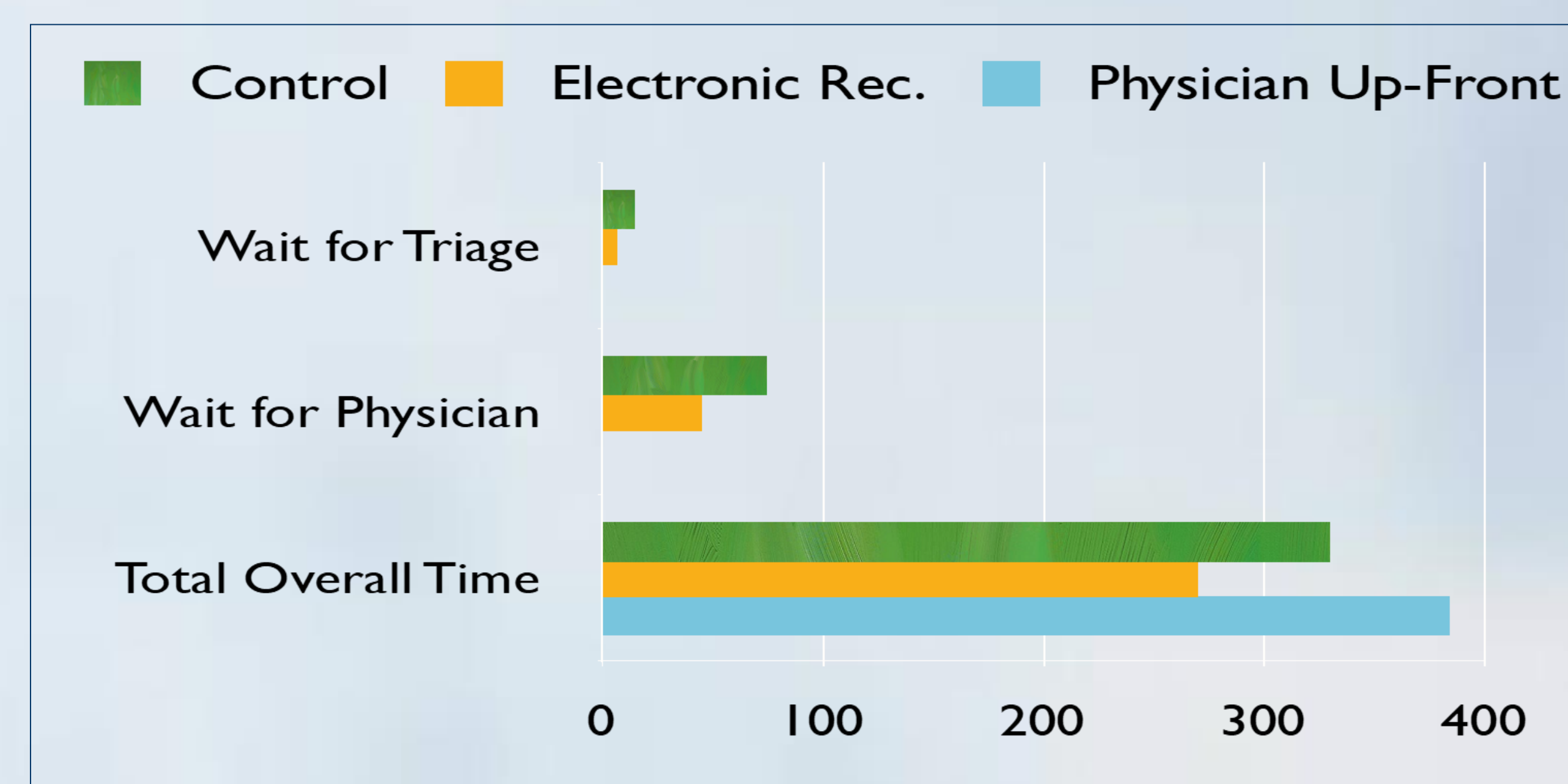
- Overflow of the ER's waiting rooms
- Inefficient use of personnel in the process
- Lack of continuity between the processes
- Lack of understanding from the patients of how the ER works.



Methodology

After evaluating the three Emergency Rooms, the overall times in the process were determined. This research presents the alternative of reducing the overall waiting to less than 6 hours and eliminating waiting time when the patient first arrives to the Emergency Room. In order to this, the following measures were implemented:

1. Two triage implementation
2. Segmentation of Fast Track (patients with category 4,5) and Acute Area (patients with category 1,2,3)
3. Creation of assigned areas of the Physicians. No more than 9 patients per Physician ratio.
4. Nurse roles revised and new functions created (coordinator, triage, phlebotomist, acute nurse, fast track nurse)
5. Creation of medication stations and not central stations



Resources Used

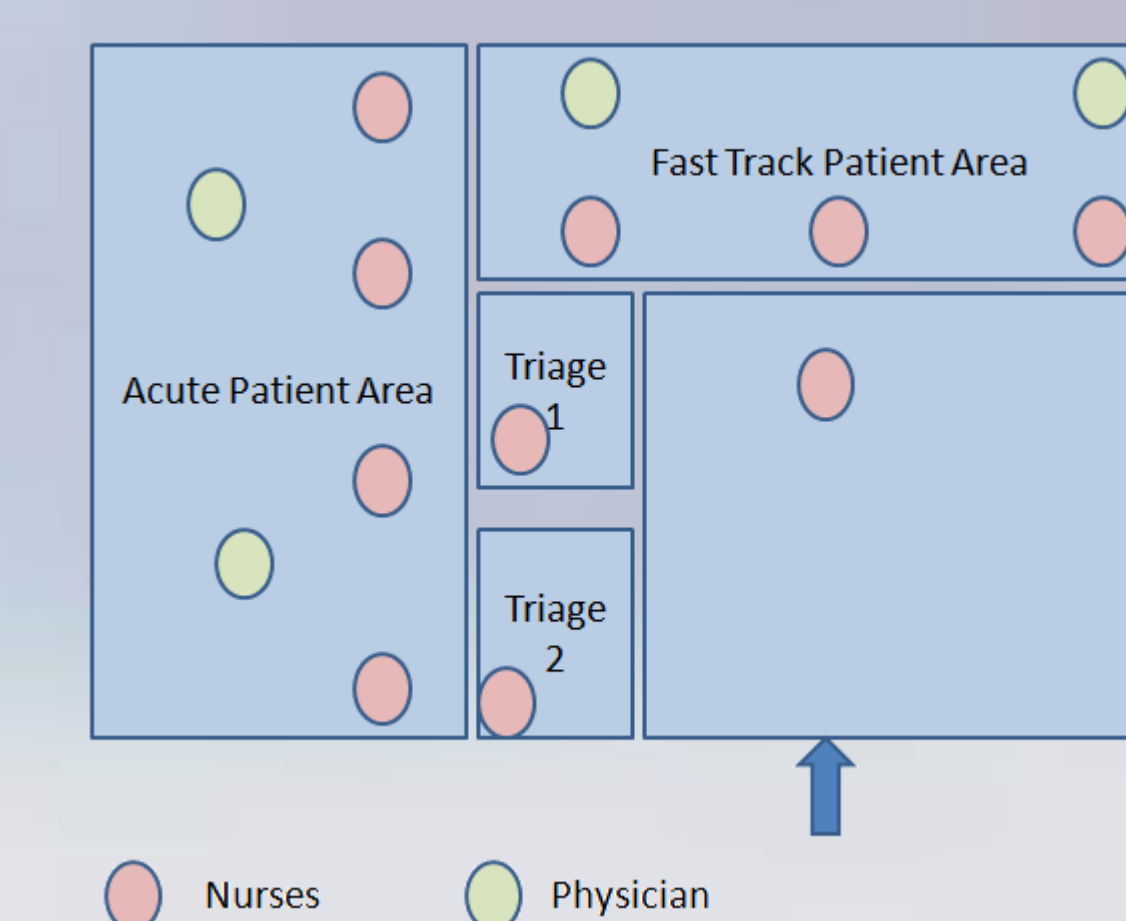
- Data was acquired through the analysis of the databases or by analyzing the paper based records
- Times were measured in real time measurements through paper based systems

Results and Conclusions

It was found that the three models of ERs studied shared the same problems and consequences. The overall problem is the lack of assigned tasks and assigned areas to the personnel. Effective use of personnel guarantees a better overall flow and a lower waiting time for patients.

No Emergency Room in Puerto Rico has ever been known to have a zero waiting time for patients, but the research presented here demonstrates that it is possible and it only needs a small effort to achieve it.

The decision to apply an Electronic Medical Record is not optional, but the transition can be made more easily if the patient flow in the Emergency Room protects the line of production no matter the consequences. Exceptions will always occur, but is important to have a strong design in patient flow that can respond to any situation.



Reference

“Emergency Medical Service At the Crossroads”, Institute of Medicine, 2006-06-14