# Proposition For Optimizing Queues At Harlem Hospital

#### **ABSTRACT**

This following report was conducted to explore the impacts on the working environment and health effects when Hospital queues are mismanaged. From the data obtained, a recommendation for a proposed solution was formulated.

#### **INTRODUCTION**

Currently, Harlem Hospital Center has extremely long lines to get medical attention.

For something as time-sensitive as healthcare this concerning. By mismanaging queues, hospitals impact the working environment, leading to adverse health effects like stress, anxiety, or pain. Current research has shown that every aspect of a person's experience—from confidence in the care provider to perceived service quality correlates negatively with longer wait times(Rothschild 2014). Not to mention, it affects their health as well(Guttmann).

Mismanaging queues goes against the purpose of Hospitals. Therefore there should be measures taken to prevent long lines.

## To determine the best course of action in order to solve this problem, I performed the following task:

- Determined the magnitude of the issue in how long patients waited in the queue. I accomplished this task by conducting a survey/poll.
- 2. Access the national average Hospital wait time with the average Hospital wait time of Harlem Hospital.
- 3. Access the working environment and adverse health effects resulting from mismanaging queues. I performed this task by interviewing a Harlem Hospital patient.

#### **RESEARCH METHODS**

Task 1. Secondary Research

Journals, books, and articles

Task 2. Primary Source/Conducting Surveys

Created a survey for 30 patients

Task 3. Observation

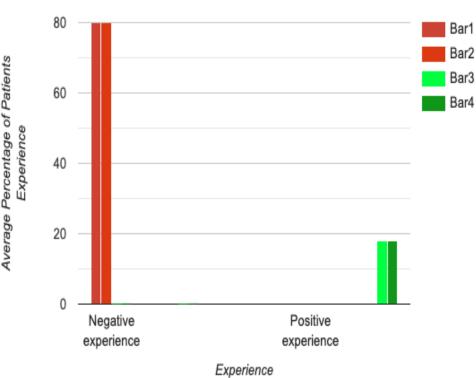
Direct observation of administration managing hospital queues 10 AM - 4 PM

#### **RESULTS**

1	Time outcomes	Mean	SD	Median	Minimum	Maximum
	Actual waiting time	55.5	35.1	49.7	39.2	60.2
:	Actual service time	10.8	11.5	12.8	1.7	21.2
r	Actual visit duration	68.3	47.9	70.2	50.1	82.2

Figure 1: Average wait time to see a physician

### Patients who waited an average wait time of 40 minutes



#### CONCLUSIOINS

#### Task 1

Almost 80% of patients have waited an average wait time of 45 minutes. This is 21 minutes higher than the national average(Rappleye).

#### Task 2

Mismanagement of hospital queues affects how a patient experiences receiving treatment from medical experts. Mismanagement of queues can also have negative consequences on a patient's health.

#### Task 3

Patients who waited less reported a positive overall experience as opposed to those who waited longer wait times tended to report a negative overall experience.

#### Recommendations

#### Option 1

Invest in queuing solutions like Qminder

#### Option 2

Triaging the queue

#### Final Recommendation: Option 1

Cost-effective, Faster queue processing

#### References

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