

***"Quality standards implementation for the improvement of outpatients clinics services in tertiary hospitals in Port Said city"***

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## **Abstract:**

The identity of beneficial pleasant standards implementation for development of outpatients clinics offerings in tertiary hospitals in portsaid town Quality development tasks and research aimed toward making nice adjustments in fitness care strategies to effecting favorable effects Physicians, nurses, technicians, and bosses are growing the effectiveness of affected person care and reducing prices in pathology laboratories, pharmacies, and blood banks via way of means of making use of the equal principles.

## **Introduction**

The necessity for pleasant and protection development projects permeates fitness care. Quality fitness care is described as “the diploma to which fitness offerings for people and populations growth the probability of preferred fitness effects and are regular with modern-day expert knowledge. According to the Institute of Medicine (IOM) report, *To Err Is Human*, four the bulk of clinical mistakes end result from defective structures and strategies, now no longer people. Processes which can be inefficient and variable, converting case blend of patients, fitness insurance, variations in issuer schooling and experience, and sever a different elements make a contribution to the complexity of fitness care. With this in mind, the IOM additionally asserted that today’s fitness care enterprise features at a decrease stage than it could and should, and it placed forth the subsequent six objectives of fitness care: effective, safe, affected person-centered, timely, efficient, and equitable. The objectives of effectiveness and protection are focused via manner-of-care measures, assessing whether or not carriers of fitness care carry out strategies which have been proven to gain the preferred objectives and keep away from the ones strategies which can be predisposed closer to harm. The desires of measuring fitness care pleasant are to decide the outcomes of fitness care on preferred effects and to evaluate the diploma to which fitness care adheres to strategies primarily based totally on medical proof or agreed to via way of means of expert consensus and is regular with affected person preferences Because mistakes are as a result of machine or manner failures ,five it's far critical to undertake numerous manner-development strategies to become aware of inefficiencies, useless care, and preventable mistakes to then have an impact on adjustments related to structures. Each of those strategies entails assessing overall performance and the use of findings to tell change. This bankruptcy will speak techniques and equipment for pleasant development—which includes failure modes and outcomes analysis, Plan-Do-Study-Act, Six Sigma, Lean, and root-reason analysis—which have been used to enhance the pleasant and protection of fitness care.

### **Key words:**

Quality standards , improvement ,waiting time, outpatients and healthcare

### **Aim of the work:**

Over the past months, some outpatient services have changed, but these changes are a tiny element of what's possible. The model is still missing opportunities to enhance our health and wellbeing and provide a step-change in how we experience them. These vital services face a series of challenges and now is the opportunity to reset these services into a completely different model, for the benefit all patients.

Variation in patterns of referral from primary care can lead to inappropriate overuse or underuse of specialist resources. Our aim was to review the literature on strategies involving primary care that are designed to improve the effectiveness and efficiency of outpatient services.

### **Discussion:-**

Identify problems in outpatient outpatient congestion and outpatient congestion

- 1- Lack/lack of human element
- 2- More patients than staff
- 3- No system
- 4- Lack of Kits / lab supplies
- 5- The entry and exit places are the same
- 6- Lack of security efficiency
- 7- There are no guide boards for entering and leaving, for example
- 8- Security is not eligible
- 9- No guide boards
- 10- Not enough medical devices
- 11- Maintenance
- 12- The location layout is wrong
- 13- There is not enough parking space
- 14- Lack of a place for screening and evaluation of patients
- 15- 1 box office
- 16- Lack of cooperation of patients
- 17- Required checks

18- There are no specific specializations 7 days a week No coordination between transfer locations and outbound clinics

The problems presented are divided into simple and complex problems .:

Complex problems	Simple problems
<ul style="list-style-type: none"><li>● Congestion and congestion of patients</li><li>● Lack of numbers of doctors and nurses</li><li>● Not all required checks are available</li><li>● There are no specializations throughout the week</li><li>● Frequent hardware failures</li><li>● Lack of coordination between switching locations and outbound clinics</li><li>● Supplies are low at the lab</li><li>● Not enough medical devices</li><li>● Lack of security efficiency</li></ul>	<ul style="list-style-type: none"><li>● No guide boards</li><li>● Lack of cooperation of patients</li><li>● Narrow spaces and stacking lanes</li><li>● There is not enough parking space</li><li>● The entry and exit places are the same</li><li>● Lack of a place for screening and evaluation of patients</li><li>● 1 box office</li><li>● No system followed</li></ul>

**Methodology:**

**Multi-voting:-**

**Member's vote No. (1):**

Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A .
20	3	4	4	4	5	Congestion and congestion of patients	1
18	2	2	5	4	5	Lack of numbers of doctors and nurses	2
10	1	2	2	2	3	Supplies are low at the lab	3
17	3	4	3	4	3	Frequent hardware failures	4
17	3	4	3	5	2	The required checks are not available	5
21	4	5	3	5	4	Lack of coordination between switching locations and outbound clinics	6
16	2	2	3	5	4	Not enough medical devices	7
19	2	5	4	5	3	Lack of security efficiency	8
11	1	2	2	3	3	There are no specializations throughout the week	9

**Member's vote No. (2):**

Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A .
23	4	4	5	5	5	Congestion and congestion of patients	1
19	2	5	4	5	3	Lack of numbers of doctors and nurses	2
16	2	2	4	4	4	Supplies are low at the lab	3
14	2	2	4	2	4	Frequent hardware failures	4
14	2	2	3	4	3	The required checks are not available	5
20	3	4	5	3	5	Lack of coordination between switching locations and outbound clinics	6
14	2	2	4	2	4	Not enough medical devices	7
17	2	2	4	4	5	Lack of security efficiency	8
9	1	2	2	2	2	There are no specializations throughout the week	9

**Member's vote (3):**

Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A .
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24	4	5	5	5	5	Congestion and congestion of patients	1
18	3	5	3	3	4	Lack of numbers of doctors and nurses	2
15	2	4	2	3	4	Supplies are low at the lab	3
15	2	3	2	3	5	Frequent hardware failures	4
13	2	3	2	3	3	The required checks are not available	5
12	1	2	2	3	4	Lack of coordination between switching locations and outbound clinics	6
11	1	2	1	2	5	Not enough medical devices	7
9	1	3	1	1	3	Lack of security efficiency	8
11	1	3	2	2	3	There are no specializations throughout the week	9

Member's vote (4):

Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A
22	4	4	5	5	4	Congestion and congestion of patients	1
19	3	3	4	4	5	Lack of numbers of doctors and nurses	2
18	3	3	4	4	4	Supplies are low at the lab	3
16	3	3	4	4	3	Frequent hardware failures	4
10	2	2	2	2	2	The required checks are not available	5
20	4	4	4	3	5	Lack of coordination between switching locations and outbound clinics	6
20	3	3	3	4	4	Not enough medical devices	7
12	2	3	2	3	2	Lack of security efficiency	8
13	2	3	2	3	3	There are no specializations throughout the week	9

Member's vote (5):

Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A
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24	4	5	5	5	5	Congestion and congestion of patients	1
16	2	4	3	3	4	Lack of numbers of doctors and nurses	2
12	2	3	2	3	2	Supplies are low at the lab	3
13	2	2	3	3	3	Frequent hardware failures	4
17	3	4	3	4	3	The required checks are not available	5
14	2	2	3	2	5	Lack of coordination between switching locations and outbound clinics	6
11	2	2	3	2	3	Not enough medical devices	7
15	3	3	3	2	4	Lack of security efficiency	8
12	2	2	2	3	3	There are no specializations throughout the week	9

Compilation of votes by members:

Priority	Sum	Cost	Influence	Easy to solve	Repeat	Importance	Problem	A
1	22.6	3.8	4.4	4.8	4.8	4.8	Congestion and congestion of patients	1
2	18	2.4	3.8	3.8	3.8	4.2	Lack of numbers of doctors and nurses	2
5	14.8	2.6	2.8	2.8	3.2	3.4	Supplies are low at the lab	3
4	15.2	2.4	2.8	3.2	3.2	3.6	Frequent hardware failures	4
7	14.2	2.4	3	2.6	3.6	2.6	The required checks are not available	5
3	17.6	2.8	3.6	3.2	3.4	4.6	Lack of coordination between switching locations and outbound clinics	6
8	14	2	2.2	2.8	3	4	Not enough medical devices	7
6	14.4	2	3.2	2.8	3	3.4	Lack of security efficiency	8
9	11.2	1.4	2.4	2	2.6	2.8	There are no specializations throughout the week	9

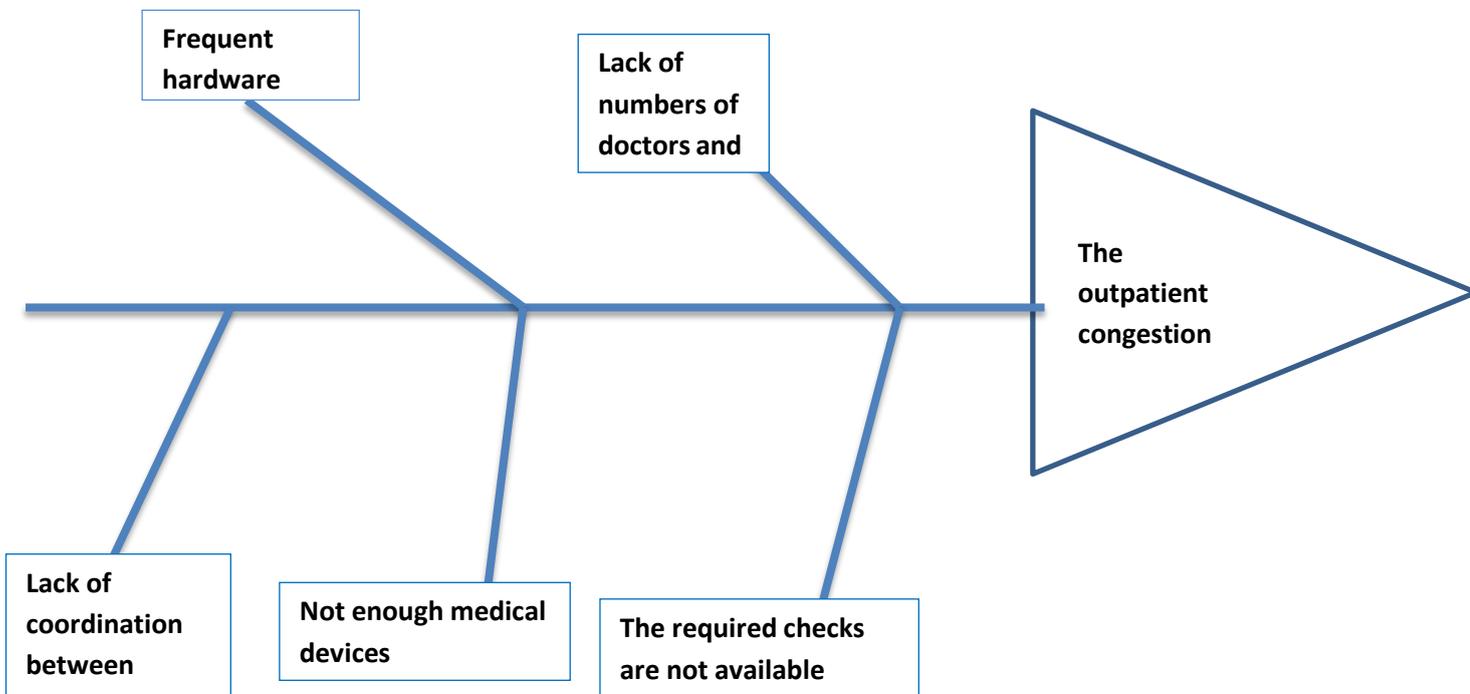
Order of problems .:

- 1- Congestion and congestion of patients
- 2- Lack of numbers of doctors and nurses
- 3- Lack of coordination between switching locations and outbound clinics
- 4- Frequent hardware failures

- 5- Supplies are low at the lab
- 6- Lack of security efficiency
- 7- The required checks are not available
- 8- Not enough medical devices
- 9- There are no specializations throughout the week

## **Fish bone :-**

To Understand the root causes of the problem:.



\* **The team responsible for solving the problem will collect the data necessary to identify the root causes of the problem and exclude the causes that are not true or minor to occur through:**

The frequency with which the problem occurs within a month

Patients' complaints

**Observation and reporting**

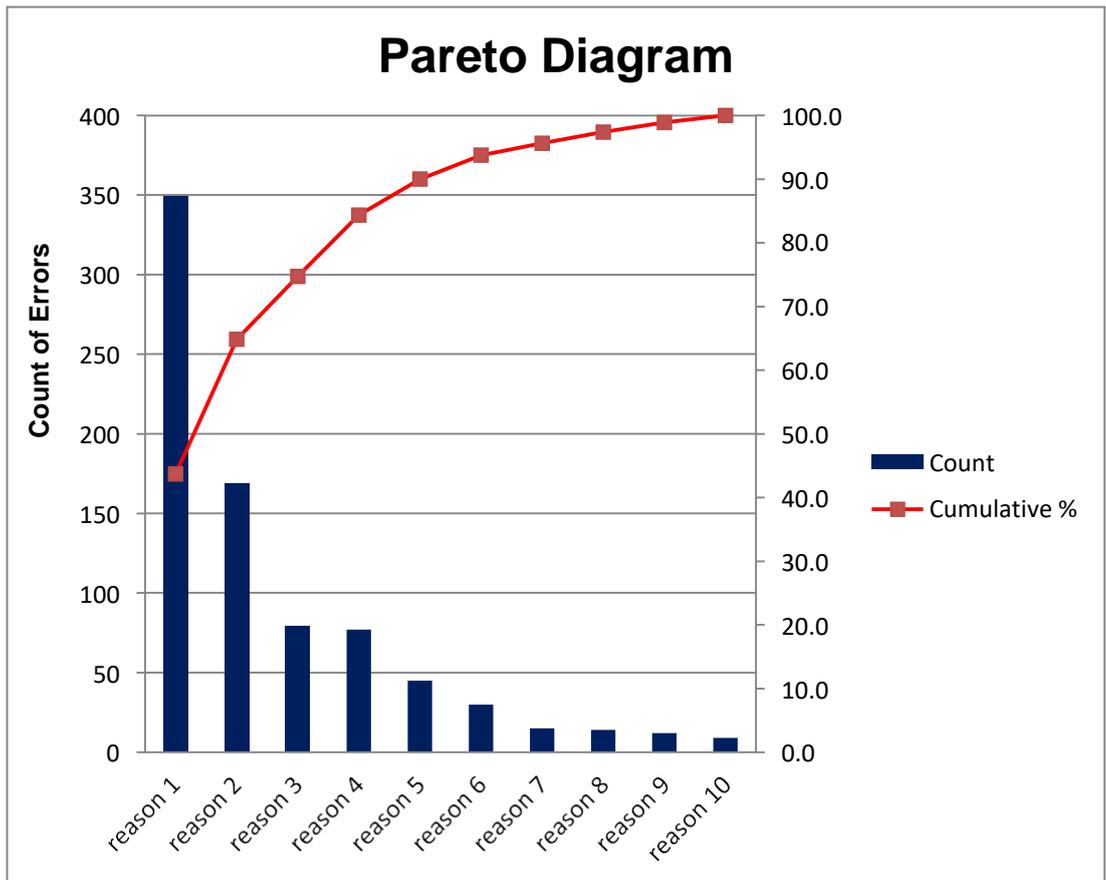
Frequency	Reason	A.
25	Lack of doctors and nurses	1
3	Lack of specializations	2
1	Lack of security	3
1	The receptionist is a small/ineligible number	4
30	Length of wait	5
1	1 box office	6
1	There is no room for evaluation	7
2	There is more than one service in one location	8
20	Lack of medical devices and frequent failures	9
2	Lack of medicines	10
2	Lack of Radiology /	11
2	Lack of training	12
2	Lack of wheelchairs and trolley	13
3	No system followed	14
3	Lack of health education	15
2	Lack of guide plates	16
100	Sum	

Pareto's Table

Cumulative percentage	Percentage	Frequency	Reason	A.
30%	30%	30	Length of wait	1
55%	25%	25	Lack of doctors and nurses	2
75%	20%	20%	Lack of medical devices and frequent failures	3
78%	3%	3%	Lack of specializations	4
81%	3%	3%	No system followed	5
84%	3%	3%	Lack of health education	6
86%	2%	2%	There is more than one service in one location	7

88%	2%	2%	Lack of radiology films	8
90%	2%	2%	Lack of medicines	9
92%	2%	2%	Lack of training	10
94%	2%	2%	Lack of wheelchairs and trolley	11
96%	2%	2%	Lack of guide plates	12
97%	1%	1%	Lack of security	13
98%	1%	1%	The receptionist is a small/ineligible number	14
99%	1%	1%	1 box office	15
100%	1%	1%	There is no room for evaluation	16
		100	Sum	

## Pareto chart:



Choose your most influential solutions : Select solution

Length of wait

Lack of numbers of doctors and nurses

Lack of medical devices and increased failures

By brainstorming the solutions and ordering them in the solution Matrix, the results were as follows

:Selection matrix

" Long Waiting Time In Outpatient Clinics "

<i>Patient</i>	<i>Ticket cut-off time</i>	<i>The time he entered the doctor</i>	<i>Hold time = Time on admission to the doctor - Ticket cut-off time</i>
1	8:10	9:05	55 Minutes
2	8:20	9:10	50 Minutes
3	8:35	9:17	42 Minutes
4	8:40	9:25	45 Minutes
5	8:54	9:33	39 Minutes
6	9:00	9:40	20 Minutes
7	9:13	9:45	32 Minutes
8	9:17	9:52	35 Minutes
9	9:35	10:01	26 Minutes
10 . . 100	9:40	10:10	30 Minutes

Average Waiting Time = 37.4 Min

70 % Waited > 30 Minutes

The solution .:

Organize the time between ticketing and the doctor's entrance to the clinic, release the treatment, and activate the reservation system

Second reason

Lack of doctors and nurses

Priorit y	Sum	Easy to solve	Interest versus cost	Time	Cost	Solutions
4	10	2	3	3	2	Contracting with different specializations
2	15	3	4	4	4	Internal mandate
3	13	3	3	3	4	Coordination with other hospitals with the same specializations
5	8	2	2	2	2	Activation of the Automation system
1	20	5	5	5	5	Redistribution of doctors and nurses

Force field analysis The first solution: Redistributing doctors The second

Opposition powers	Supporting forces
Fear of extra burdens	The administration's desire to cover all outpatient clinics  Cooperation of the Director of outpatient clinics  Cooperation of the Nursing Supervisor and the Nursing Team

solution: Coordination with other hospitals having the same specializations ∴

Opposition powers	Supporting forces
Fear of extra burdens	A comprehensive health insurance system that allows for easy coordination Eliminate queues The desire to improve the quality of healthcare Achieve customer satisfaction

The second reason is lack of medical devices and frequent failures

Priority	Sum	Easy to solve	Interest versus cost	Time	Cost	Solutions
2	24	5	4	5	5	Scheduled maintenance
3	16	4	4	4	4	Inventory of broken-down equipment and coordinate with the companies responsible for it
4	11	3	4	2	2	Replace damaged hardware
1	25	5	5	5	5	Train personnel in the correct use of equipment

### Force field analysis

The first solution is to train the staff in the proper use of the equipment .:

Opposition powers	Supporting forces
No training time	Training room available Having a training team The desire and encouragement of the Ministry of Health for ongoing training Administrative support

The second solution: Periodic maintenance .:

Opposition powers	Supporting forces
Some hospital maintenance personnel are not cooperative	There is a maintenance team inside the hospital Monitoring maintenance reports Ease and collaboration of medical staff to report faults Hospital management support

### **Conclusion**

A web-based appointment system to reduce waiting for outpatients like VISITA

Compared to the usual queuing method, the web-based appointment system could significantly increase patient's satisfaction with registration and reduce total waiting time effectively. However, further improvements are needed for broad use of the system. Moreover, to attract more patients to use online system, operation should be made even easier and more user friendly by enhancing system service quality (for instance, webpage uploading speed, user-friendliness of webpages and search for information) and information variety.

### **Recommendations:**

In the light of our study findings ,the following recommendations are suggested Contracting with different specialties which show shortage in man power in outpatient clinics along with internal assignment and coordination with other hospitals with the same specialties if possible, redistribution of doctors and nurses of other departments with lower work load.

Periodic maintenance, replace of damaged hardware ,coordination with the companies responsible for them along with training employees on the correct use of equipment ,maintenance team inside the hospital ,cooperation of the medical team to report malfunctions.

Organizing the time between ticketing and the time of doctors arrival to clinics also activating of online reserving system for the exact date and time of examination.

All these points with the help of powerful administration willing to overcome the problem of overcrowded outpatient clinics under the umbrella of the universal health insurance in port said hospitals.

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