

# Measuring Quality Performance of Public Hospitals in Somalia.

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## Abstract

Public hospitals are government-owned hospitals, but they're not fully funded by the government. The UN provides the majority of funding for public healthcare; however, very little is known about the quality of public hospitals in Somalia.

**Purpose:** This study aims to evaluate the quality performance of public hospitals by using nine indicators, namely, patient waiting time, patient complaints, patient satisfaction, employee job satisfaction, medical service cost, shortage of medical services, errors in medical services, waste in processes, and availability of quality medical equipment.

**Methodology:** First, the research began by mapping referral public hospitals in federal states of Somalia. Second, using simple random sampling with a self-administered questionnaire targeted at 16 public hospitals with 30 respondents, for a total of 480; however, two hundred and ninety-seven respondents have accepted to participate in

the study, these make in a response rate of 62 percent. Research data were analyzed based on descriptive analysis.

**Findings:** The findings of this study indicate that the majority items of the quality performance mean values were less than the midpoint of the scale (mean = 2.909, the standard deviation = 0.867). This indicates that the majority of the respondents were either neutral or agreed with the negative scale about the quality performance of the public hospitals.

**Research limitations:** This research focused solely on the quality performance of the Somali public hospitals; thus, the results might not be applicable to other countries.

**Originality/value:** Present research findings provide guidelines for enhancing quality performance in the Somalia public healthcare sector.

**Keywords** Somalia, Quality performance, Public hospitals.

## Introduction

After the civil war erupted in 1991, Somali healthcare was largely in the private sector, but over the past decade, public hospitals have been reestablished and run by the government. Each state has a regional referral hospital and there are also numerous small clinics and MCHs.

While the country's healthcare system has been gradually improving over the years, it still lags behind Kenya and other bordering countries in terms of quality services. Factors affecting the quality of public health services are numerous however, Kamau (2009) argues that a lack of medical facilities and equipment is one of the major factors contributing to the poor performance of public hospitals. Hassan (2021) highlighted that the quality of the antenatal care services in public hospitals is not up to standard. Bogren et, al. (2020) revealed that the scarcity of medical professionals has an impact on hospital treatment quality.

In response to public health obstacles, government expenditure in the public healthcare sector has been increasing for the last couple of years. According to the national budget plan for 2023, the government allocated FMoH a sum of \$83,619,836. FMoH (2022) states that the government is working to enhance nutrition,

prevent disease, promote health, and support the growth of family and community health through effective and efficient public healthcare services.

This study would provide information for healthcare managers and hospital policymakers to enhance public healthcare services.

## Literature

Quality pioneers disagree about having one common definition for quality; however, Juran (1981) defined quality as fitness for use. In the field of quality, there are numerous theories developed during the past few decades. These include; Bureaucratic Management theory developed by Max Weber (1864-1920), Scientific Management theory developed by Frederick Winslow Taylor (1856-1915), Deming theory developed by W. Edwards Deming (1986), Trilogy developed by Joseph Juran (1986), and the 14 Steps to Quality Improvement developed by Crosby (1979).

To address quality issues in health care organizations, a number of studies have been carried out. Ahmed *et al.* (2018) found that countries that have made commitments to quality have seen a significant improvement in public healthcare. Tezel *et al.* (2023) declare that the quality improvement method

has been a significant source of concern for healthcare organizations. There is a large volume of published studies describing the role of waiting time on quality performance. According to Usman *et al.* (2020), patient waiting times are a significant sign of the quality of services provided by hospitals. Burroni *et al.* (2021) claim that hospitals may perform better in terms of quality if they eliminate unnecessary long cycles and waiting periods. The evidence presented in this section argues that even though cost is a barrier, over one-third of the population visits private hospitals to receive medical care. (Kalid *et al.* 2018).

To the best of our knowledge, this study is one of the first studies that aims to investigate the quality performance of public hospitals in Somalia.

## Methodology

First, the researcher began by mapping existing regional referral public health hospitals in each federal member state. Second, using simple random sampling, the researcher targeted 480 respondents in 16 public hospitals; each hospital targeted 30 respondents, for a total of 480; however, two hundred and ninety-seven responses were received (62 percent response rate). Targeted hospitals are located in the federal member

states of Somalia, namely, Hirshabele, South-West, Galmudug, Jubaland, Puntland, Khatumo, and Banadir (Mogadishu, the capital city).

Hospitals' quality performance was measured against nine criteria, namely, patient waiting time, patient complaints, patient satisfaction, employee job satisfaction, medical service cost, shortage of medical services, errors in medical services, waste in processes, and availability of quality medical equipment. These items were adopted from papers by Ahmed *et al.* (2017), Gowen *et al.* (2012), and Antony and Kumar (2012).

The majority of the respondents were doctors, nurses, pharmacists, and medical laboratories. The reason for collecting data from them is that they are the key service providers for the hospital.

The study followed ethical principles for research and was approved by the Somali Researchers Association (SRA) ethical committee.

## Findings

This section presents the preliminary analysis of the collected data. The analysis covers calculating five-point Likert scale, it is considered an interval scale. The mean is very significant. From 1 to 1.8, it means

strongly disagree. From 1.81 to 2.60, it means to disagree. From 2.61 to 3.40, it means neutral. From 3.41 to 4.20, it means agree. From 4.21 to 5, it means to strongly agree. Table 2 illustrates mean and standard deviation values for nine items of quality performance.

### Mapping Public Hospitals

The researcher began by mapping existing referral public health hospitals in each state: The selected facilities properly function as regional referral hospitals in the Federal State of Somalia. Table 1. illustrates the locations of referral hospitals.

<b>Hirshabele</b>	<b>Galmudug</b>
Jowhar Hospital	Dhuuso Mareeb Hos.
Baladwayn Hospital	Galkayo Hospital
<b>Puntland</b>	<b>Khatumo State</b>
Garowe G. Hospital	Lascanood G. Hospital
Bossaso G. Hospital	<b>Banadir</b>
Khardho G. Hospital	Madino Hospital
<b>South-West</b>	Lasareti Hospital
Baidoa G. Hospital	Digfer (Ordagan) Hos.
Hudur G. Hospital	Banadir Hospital
Marko G. Hospital	Martine Hospital
<b>Jubalad</b>	
Kismayo Hospital	Garbaharey Hospital

Based on an analysis of the mapping, a sample of one or two hospitals was selected to represent public health facilities in each state.

A team member conducted an interview with a health practitioners using an online survey tool with a pre-defined questionnaire.

### Demographic Profile

In this study, the majority of the respondents are males 158 (53%), whereas female respondents are 139 (47%).

**Age-wise**, (36%) of the respondents are 30 years of age and below; (48%) are 31–40 years old; (12%) are 41-50; and (4%) are above 51 years of age.

**Occupation:** this study secured (52%), nurses, (32%) doctors, (8%) pharmacists, and (5%) medical laboratory, others (3%). Regarding the working experience of the respondents, (36%) were those working 1–3 years, (32%) were those working 4–6 years, (24%) had 7–10 years of working experience, and (8%) respondents had more than 10 years of working experience in the hospital.

### Analysis of Quality Performance in Public Hospitals.

The present study investigates the quality performance of public hospitals in Somalia. Table 2 illustrates mean and standard deviation values for nine items of quality performance.

Variable Item	Mean	Std. Dev.
Patient Waiting Time	3.700	0.806
Patient Complaint	1.333	0.587
Patient satisfaction	3.040	0.608
Employee Job Satisfaction	3.188	0.988
Medical Service Cost	3.639	1.0469
Shortage of Medical Services	4.077	0.844
Errors in Medical Services	3.016	1.024
Waste in Processes	2.191	0.9622
Quality Medical Equipment	1.993	0.937
Overall	2.909	0.867

### Patient Waiting Time

Patient waiting time refers to the time that patient spends in the hospital before he/she sees a medical staff, and the waiting time is considered one of the factors that affects the quality of hospital services. Respondents were asked how long it takes a patient to meet with medical personnel (waiting time). According to the findings, on average, patients had to wait for more than two hours to meet with a doctor.

A respondent said, “After hours of waiting, the patient sees the doctor for less than ten minutes in the consultation room.” The reason for the long wait is that there are a limited number of doctors, a large number of patients, and a shortage of public hospitals.

### Patient Complaint

Patient complaints about the service quality are a concern within public hospitals. Respondents were asked, if patients complain about hospital services. List options were

given: always, sometimes, and never. The results of the descriptive analysis indicate that the overall response to this variable was negative. (73%) of the respondents stated that patients always complain about hospital services, while 21% highlighted sometimes, and only 6% replied that they do not complain about the hospital services. It can be concluded that patient complaints are a sign of weak quality performance in public healthcare.

The next question asked of the informants was about patient satisfaction with the service. It was observed that the mean was the midpoint of the scale (mean = 3.040 and standard deviation = 0.6082). In this regard, respondents (hospital staff) believe that their patients’ satisfaction level is neutral.

### Employee Job Satisfaction

Evidence suggests that employee job satisfaction is among the most important factors reflecting quality performance at public hospitals. Respondents were asked to rate their job satisfaction. The overall magnitude of job satisfaction was neutral in public hospitals (mean = 3.198, standard deviation = 0.991).

A respondent commented that “medical professionals continue to make sacrifices in order to care for patients despite the limited government funding.

### **Medical Service Cost**

Service costs include fees paid to the facility, the doctor, and any other health professionals. In principle, there is no fee charge for a consultation at the public-run hospitals, but patients pay minor fees for services, as a social contribution and commitment fees.

Respondents were asked if service charges are affordable for low-income patients. The study found (mean = 3.639, standard deviation = 1.046), which indicates respondents agree that medical service-related costs are affordable for patients attending public hospitals.

### **Shortage of Medical Services**

A shortage of medical services has been considered a major concern in public hospitals for many years. Respondents were asked if patients experienced a service gap in the hospital. The results of the descriptive analysis indicate that the majority of the respondents favored the positive statement; mean values were higher than the midpoint of the scale (mean = 4.077, standard deviation 0.844). This means that the respondents either strongly agree or agree that there's a shortage of medical services in public hospitals.

### **Errors in Medical Services**

Medical errors can include not acting on test results, not taking necessary precautions, missing or delayed diagnoses, avoidable treatment delays, poor post-treatment follow-up, inadequate post-procedural monitoring, and more. Respondents were asked about the existence of errors in medical services in public hospitals. Findings illustrate that medical errors (mean = 3.016 and standard deviation = 1.024) which is meant respondents were neutral about this phenomenon.

### **Waste in Processes**

Inadequate process design results in needless service duplication, which slows patient care and may compromise performance quality. Respondents were asked "there's no unnecessary step in the process that could not add value to the services." Findings show that the mean is 2.191 and the standard deviation is 0.962. This shows that there's limited duplication in the work process. In other words, there's no waste in the process.

### **Quality Medical Equipment**

Using high-quality medical equipment can contribute to quality performance and patient satisfaction. The research aimed to measure public hospitals' availability of quality

medical equipment. The study found that (mean =1.99, standard deviation = 0.937) This suggests that the majority of the respondents either strongly disagreed or disagreed that public hospitals have quality medical equipment.

A respondent said, “Patients trust private hospitals more than public hospitals because they believe that they have modern and advanced equipment.”

## Discussion

This study measures the quality performance of public hospitals in Somalia. Based on the present finding, employee satisfaction is neutral. However, Alqasmi and Ahmed (2023) argue that satisfied employees can have a significant impact on the quality of patient care. This study also investigated the quality equipment in public hospitals. The research results indicate that public hospitals are lacking quality equipment. The findings align with Kamau, (2009) found that a shortage of medical facilities and equipment is one the issues influencing the quality of public health services. This study has also examined patient waiting times. The findings of this study disclose that patients had to wait for more than two hours to meet with a doctor. According to Usman *et al.* (2020), long waiting times can have a negative

impact on quality services provided by hospitals.

Apart from the above findings, the present study also investigated waste in the process. Based on the results, it was observed that public hospitals managed unnecessary long cycles in the process. This finding is consistent with the prior study by Burrioni *et al.* (2021), who claim that hospitals may perform better in terms of quality if they eliminate unnecessary long cycles and waiting periods.

## Conclusion

The findings of the study show that there are several obstacles that public hospitals must overcome in order to offer high-quality care. The current study found that public hospitals are lacking quality equipment, and patients complain about hospital services. According to the findings, on average, patients had to wait for more than two hours to meet with a doctor, and there’s a shortage of medical services. The most obvious finding to emerge from the analysis is that, unlike private hospitals, there’s no unnecessary process cycle in public hospitals.

In conclusion, the need for government funding and quality improvement in public hospitals cannot be underestimated.

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## Conflict of Interest

Authors declare no conflict of interest.

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