



An audit on appointment-patient waiting time in Zayed Military Primary Health Care Centre



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Abstract

This audit will measure the waiting time through patient journey in Zayed military primary healthcare center (ZMPHCC), starting from registration encounter until entering consultation room. A standard criteria was set as following: at least 80% of patient's waiting time is less than 30 minutes, from registration counter to nurse triaging until entering physician room. A retrospective audit conducted for a period of 4 weeks in June 2021, the waiting time from registration to entering physician room was analyzed and compared with overseas studies. Data were collected from automatically recorded information at Cerner system by IT team at Zayed Military Hospital. A total of 612 appointment patients were seen in clinic during 4 weeks period were include. Non-attended patients, Doubled registration and Patients with no time recorded were excluded, a total of 204 were eliminated before Randomization. A total of 408 patients underwent systematic randomization, 203 patients were selected using 1:1 ratio. Only 63.5% from appointment patient visits achieved the set target criteria time (< 30 minutes) in total waiting time. Less waiting found in nurse triaging with an average of 13 minutes with a target criteria time <15 minutes.

Introduction

It's been shown that the less waiting time the more the satisfaction rate among patients (Michael et al., 2013)², however, patients prefer longer consultation time in general practice (Deveugele, 2002)³. Patient satisfaction is also influenced by the condition and attractiveness of the waiting area; the availability of entertainment such as television and reading material related to health may improve their anticipation (Feddock et al., 2005)⁴. Other evidence shows that 30 minutes is acceptable for the majority of patients (*How Patient Wait Times Affect Customer Satisfaction*, 2019b)⁵. Overseas studies have shown that patients are willing to wait an average of between 30 and 45 minutes to see a doctor (*How Patient Wait Times Affect Customer Satisfaction*, 2019b)⁵. A loaded number of patients, shortage of staff either physicians or nurses, dysfunctional consultation and long waiting for test results may contribute to the lengthening of waiting time.

Methods and Materials

A retrospective audit is done on a sample obtained from the hospital information system and database (Cerner). The full patient's journey is divided into three main aspects starting from registration to triage waiting time then triage to physician, and finally, consultation time length ended with the physician signing the note. Accordingly, appointments for patients who attended the clinic were from the 1st to the 30th of June.2021 throughout AM and PM shifts were included, and with accurate data and time, a total of 612 patients were found in the list for this month.

A total of 612 appointment patients were selected, whether new or follow-up then. Only 408 patients were found with accurate recordings of time waiting from the registration until the start of consultation time.

The final sample size is 408, then the sample size calculator used with a confidence interval of 95% and a margin of error is 5%, we get the final sample size of 198, the same sample selected to be studied on this audit is 203 due to systemic randomization. Selecting by computer generation 1:1 ratio.

Elimination of 204 patients in a total of the following groups, including 74 non-attended patients, and patients with non-recorded waiting time, in addition to, 130 patients with double registry under a different physician.

The period selected from 1st. June.2021 until the 30th of June 2021.

Results

Out of 203 appointment-patient visits, showed 63.5% achieved in <30 minutes total waiting time (total nurse triaging + pre-consultation), with an average of 33 minutes. Less waiting found in nurse triaging with an average of 13 minutes, whereas longer in consultation time. with an average of 22 minutes. The waiting average with the percentage achieved in comparison to the set criteria is shown in table 1. Figure 2 the comparison between the average time among nurse triaging, pre-consultation and consultation time.

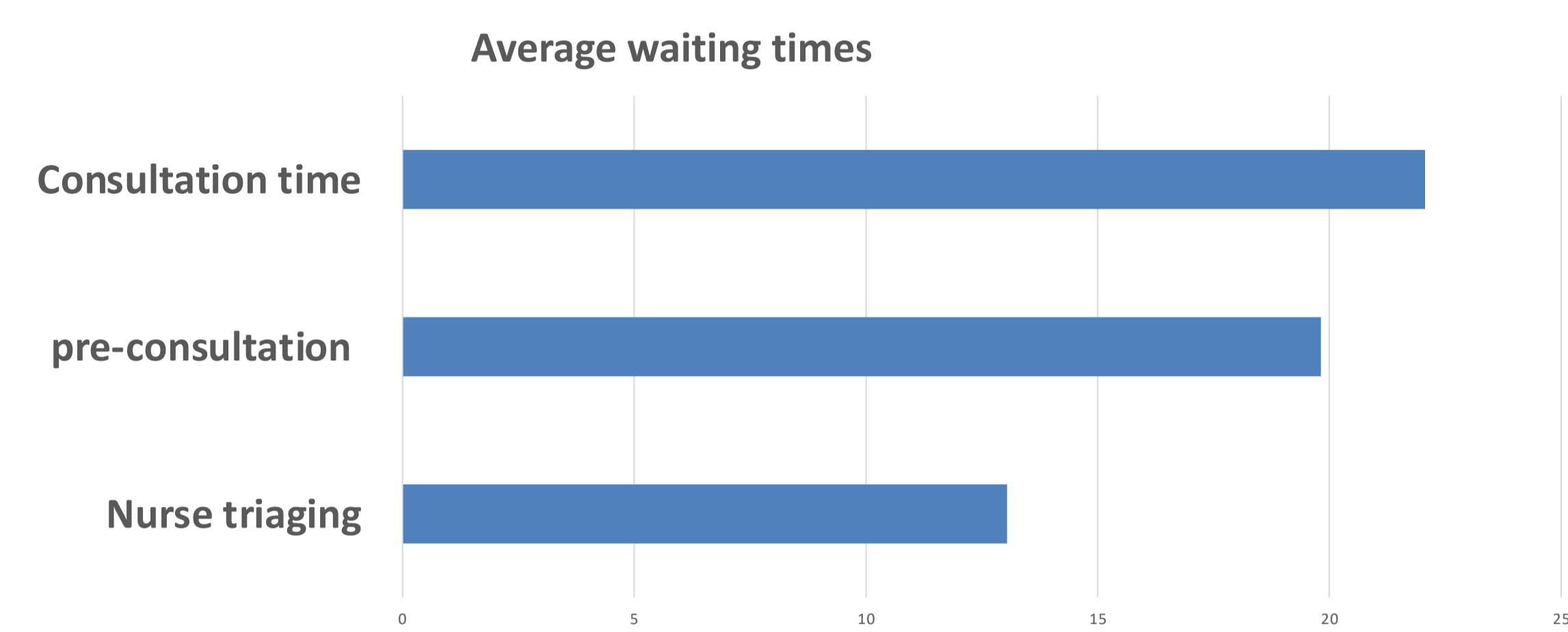


Figure 2. Average time among nurse triaging, pre-consultation and consultation time.

Discussion

The good outcome of this audit is total waiting time (total of nurse triaging+ pre-consultation) was acceptable compared to the audit criteria. The mean average of 33 minutes attained in 63.5%, presents the compliancy of most of the physicians. However, the percentage didn't achieve the target criteria of at least 80%. Factors contributing to lengthy pre-consultation waiting time may be related to the physician, nurse, or system that should be determined to reach the target criteria. In general, patients anticipate fast and quick services, however, it's found that patients are eager to wait longer if they get to see a familiar physician (Bower, 2003)⁶. Nurse triaging with an average of 13 minutes on target of fewer than 15 minutes is 74.4%, it's the shortest average shown in figure 2, nevertheless expected to be even less than 13 minutes, as vital assessment shouldn't take more time. This audit found challenges were related to nursing staff shortage, increased patient flow and lack of competency in some of the nursing staff (whether in performing under or triaging assessment).

Pre-consultation time (from completing triage to start of consultation) showed a result of 61.6% with a mean average of 20 minutes of waiting. Which increases the total waiting time, as the nurse triaging average is less. Many reasons could explain that including high patient flow with a shortage of physician numbers, some patients might take longer consultation time and longer breaks between patients. Often, consultation time can vary from long to short, depending on the physician's perception or the patient's demand. In this audit, 77.8% achieved the target criteria of less than 20 minutes in the consultation room. The average time of 22, which considered the longest among audit studied variables as shown in figure 2. Many studies showed that patients prefer to spend a long time consulting a physician (Ahmad et al.,2017)⁷. In contrast, a study showed that physicians who consult for less than 7 minutes are likely to miss to discussing the psychosocial part. All associated with physician perceptions are identifying the patient's psychosocial issues, considering details or brief history, taking investigations, and giving more health maintenance advice (Wilson et.,2002)⁸.

Conclusions

The clinic needs to implement some changes to improve the delivery of care and practice performance on patient waiting time. Also, provide further questionnaires to assess patients' views on the clinic services including waiting facilities.

Table 1. waiting time and the average patient waiting time and the percentage achieved in compared to the set criteria

Waiting time	The definition	Set target criteria	Average time (mins)	% Achieved to standard criteria
Nurse triaging	The time from registration to triage nursing staff	<15 mins	13	74.4
Pre-consultation	Time from triage to start of consultation	<15 mins	20	61.6
Total Nurse triaging + pre-consultation	Time from registration to start of consultation	<30 mins	33	63.5
Consultation time	Time from start to end of physician consultation	<20 mins	22	77.8

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