Monitoring Patient Flow in the Emergency Care Units (UPA) in the City of Guarulhos, São Paulo, Brazil

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EXECUTIVE SUMMARY

Performance indicators are an important tool for managers to identify how their organization is performing over time. Thus, a concept of the patient's timeline within the health unit was defined, which consists of monitoring from entry to exit, considering all the steps that patients went through during their stay in the emergency care units (UPA). This concept was applied to allow the monitoring of the performance of two UPA's being classified as (1) and (2) in the city of Guarulhos, SP. Data treatment was realized by Excel and were collected from 383 patients (UPA 1 only odd days) and 1123 patients (UPA 2 all days) between 02/01/2021 and 02/28/2021 then proceeded to the organization of data to analyze the processes flow involved. Patients were grouped according to risk classification—red, orange, yellow, green, and blue—and especially medical clinic, orthopedics, pediatrics, dental attendance. Both UPA evaluated the major attendance were classified with green and blue, and in terms of treatment, the medical clinic was priority when compared with others offered in these UPA.

INTRODUCTION

The health attendance is a problem in all cities in the world. In development countries, government are obligated to improve new alternatives to improve the service level to population. During the last century, the cites suffer with great migration processes, where a great mass of people move to cities. Naturally, with high demand to health treatment, the public service point attendance was more demanded, and some places started a system collapse. Then, in the country as Brazil, the main part of health attendance is realized by Unified Health System - Sistema Unico de Saúde (SUS). During much time was noted that Brazilian service quality presents structural problems persist in SUS, including gaps in organization and governance, low public funding, and suboptimal resource allocation (Massuda et al. 2018) and it were noted by population. Elevate time on the queue waiting to be attendant, long time to realized exam and other problems are reported in literature (Jurberg, 2008; Massuda et al. 2018; Iasbech et al. 2018). On the other hand, there have been advances, including investments in human resources, science, and technology, and a substantial decentralization process, widespread social participation, and growing public awareness of a right to health care and primary care (Paim et al. 2011). In this context, to mitigate these problems, during the time several proposals were suggested, implemented, assessed and some could present satisfactory results.

Therefore, In Brazil, in 2007, the first Emergency Care Units (UPAs) were created in the State of Rio de Janeiro to respond to the crisis in the health system (Konder and O'Dwyer, 2016). The successful experience allowed them to be included within the strategies of the National Emergency Care Policy for better organization of care, articulation of services and definition of patient care flows. This strategy appears as one of the initiatives to address the problem of overcrowding in hospital emergencies (Oliveira et al. 2015). The UPA's are distributed throughout the country with approximately three hundred units. The main purpose is to attending cases of medium and low complexity to support large hospitals in cities (Silva and Santos, 2014).

All patients that arrive at UPA will be shared by everyone will be the service triage process (Camilo et al, 2020). The User Embracement and Evaluation with Risk Classification (AACR) protocol recommends the stratification of risk in levels of priority, referred to by color, and related to waiting time for medical attendance, presenting greater credibility, validity, and reliability in the evaluation of the patient's actual status (Pícoli et al, 2016).

The risk classification system adopted presents five colors, red being for immediate attendance, orange for severe urgency, yellow for urgency, without immediate risk of death, green being for no immediate risk of death, and blue for a chronic situation without acute suffering, or social cases (situations in which referral to the Basic Health Center is possible) and which can be attended after all the patients classified as red, yellow and green have been seen (Zanon et al. 2016; Pícoli et al, 2016; Amorim et al. 2019; Silva et al. 2021).

The Brazilian Ministry of Health's recommend that the color identifies the maximum waiting time indicated for medical care, respectively: emergency – immediate care; orange – 10 minutes; yellow – 60 minutes; green – 120 minutes, and blue – 240 minutes (Chabudé et al, 2019).

UPA has the conception to attend patients during the 24-hour per day (1440 minutes) and offers a simplified structure, with X-rays, electrocardiography, pediatrics, an examination laboratory, and observation beds (Ministry of Health, 2022).