

## IMPLEMENTATION OF SERVICES IN EMERGENCY INSTALLATIONS

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### ABSTRACT

The Emergency Department (ER) is a vital unit in hospital services because it provides immediate treatment for patients in critical condition. However, the ER of Urip Sumoharjo Hospital , Lampung Province, faces the challenge of overcrowding . Based on data from June 2025, the number of ER patient visits reached an average of 182 patients per day, while the bed capacity was only 35 units. This situation has an impact on increasing patient waiting times of more than 2 hours and decreasing satisfaction with services. Objectives: To find out the implementation of services in the Emergency Department, identify problems that occur, and formulate strategic solutions . Method: Qualitative research using an interview guide as an instrument. The informants in this study consisted of the Head of the Emergency Room, the attending physician, and the head of the service team. Results: The results showed that overcrowding was caused by high patient visits, limited inpatient beds, a suboptimal triage system , and the lack of specific SOPs for full conditions . Conclusion: emphasizes the need for the preparation of overcrowded SOPs , triage officer training, case placement managers , and public education regarding the emergency department's service flow. This strategy is expected to improve the effectiveness and quality of emergency department services.

Keywords: emergency room; hospital; overcrowded; service quality; triage

### INTRODUCTION

Emergency Department (ER) services are a critical component of the hospital care system, serving as the first point of contact for medical emergencies. The problem of ER overcrowding has become a national and global issue. Data from the Indonesian Ministry of Health shows that more than 35% of ERs in type B and C hospitals in Indonesia experience a visit load exceeding optimal capacity (Ministry of Health, 2023). Research by Iskandar et ( 2021 ) stated that overcrowding has a direct impact on declining service quality, increasing the risk of nosocomial infections, and delaying medical interventions that should be immediate (Iskandar, Y., Prasetya, R., & Winarti, 2021) . Furthermore, an international study by Morley et al. (2018) emphasized that overcrowding in the ER affects patient satisfaction, increases the workload of healthcare workers, and is a major cause of adverse events . events ) ( Morley et al., 2018).

Research conducted by Trivedi et al. (2019) showed that the high volume of patients that is not commensurate with the resource capacity in the ER causes increased waiting times and decreases service efficiency ( Trivedi , T.K., Liu, C., Whipple, Z., Gabayan, G.Z., & Sarkar, 2019) . Meanwhile, a study by Hoot and Aronsky (2008) in the journal *Annals of Emergency Medicine* states that ED overcrowding is correlated with increased mortality and significantly decreased patient clinical outcomes ( Hoot & Aronsky, 2008). In addition, the study by Affleck et al. (2013) showed that a triage system based on time and priority indicators can reduce service load by up to 18% ( Affleck , A., Parks, P., Drummond, A., Rowe, B.H., Ovens, H., & Calder, 2013) . Research by Sun et al. (2013) found that waiting times of more than 6 hours were associated with increased mortality rates for emergency patients (Sun, BC, Hsia, RY, Weiss, RE, 2013) . Meanwhile, research by Bernstein et al. (2009) underlined the importance of real-time information systems in monitoring ED load and accelerating clinical decision-making ( Bernstein et al., 2009). Research from Van der Linden et al. (2016) also confirmed that patient flow management interventions were able to reduce ER stay times by up to 20% (Van der Linden, C., Meester, BEA, & van der Linden, 2016) , while McKenna et al. (2019) demonstrated that improved coordination between

the ER and inpatient wards accelerated patient transfer flow ( McKenna et al., 2019) . Similarly, a study by Kelen et al. ( 2021 ) emphasized that the burden of emergency room visits is closely related to the hospital system's preparedness to face a mass influx of patients (Kelen et al., 2021). Urip Sumoharjo Hospital in Lampung, based on internal data from June 2025, patient visits reached an average of 182 people per day, while the emergency room capacity only accommodates 35 patients. This condition causes patients to have to wait in the transit room for quite a long time, exceeding the ideal waiting time standard for emergency services according to the WHO, which is 15–30 minutes for red triage cases ( emergency ). This phenomenon indicates an inefficiency in the service flow system that impacts patient quality and safety (Handayani, D., Putri, ND, & Sari, 2020). This study was based on the need to comprehensively evaluate the implementation of services in the Emergency Department of Urip Sumoharjo Hospital. Previous research conducted by Widyastuti et al. al. (2023) and Oktaviani et al. (2022) also emphasized the importance of an optimal triage system and the need for management-based interventions to systematically address overcrowding issues. (Widyastuti, I., Utami, A., & Rahmawati, 2023) , (Oktaviani, T., 2022)

## **METHOD**

Study This use approach qualitative with technique data collection through interview in-depth , observation , and Focus Group Discussion (FGD). Instruments main used is guide interview . Informant consists of from Head Emergency room , doctor guard , and chairman team service . Data analyzed in a way thematic For identify problem , root causes and potential solutions that can implemented by management House Sick (Miles, MB, & Huberman, 2014).

## **RESULTS**

Based on interviews and observations, it was discovered that the emergency room at Urip Sumoharjo Hospital was experiencing a major problem of overcrowding. Data analysis showed that the average number of patient visits reached 182 per day, significantly exceeding the capacity of the ward, which only has 35 beds. This situation was exacerbated by delays in transferring patients to inpatient rooms due to limited room availability, resulting in a buildup of patients in the transit area. Triage system in use is not yet functioning optimally. Interviews with triage officers revealed that many non-emergency patients are still being treated in the emergency room due to a lack of public understanding of the emergency room's function and the absence of strict regulations regarding the initial patient selection process. This leads to longer wait times for emergency patients as medical resources must be shared. (Sari & Fajarini, 2022). Furthermore, the lack of specific SOPs governing the handling of overcrowded situations means healthcare workers are working without clear guidance when dealing with a surge in patients. This increases the risk of burnout, stress for nurses and doctors, and the potential for medical errors (Yulianti, E., & Fibriana, 2022). In the thematic analysis, the main themes that emerged were: 1) Patient overcrowding as a barrier to service, 2) Unpreparedness of the triage system , 3) The need for overcrowding regulation , and 4) Lack of cross-unit coordination in expediting patient referral flow. All of these themes point to the need for comprehensive improvements in emergency service system management.

## **DISCUSSION**

The results of this study are in line with Donabedian's theory , which states that service quality is influenced by three main components: structure, process, and outcome ( Donabedian , 2016) . In the context of the Emergency Department at Urip Sumoharjo Hospital , overcrowding directly disrupts the service process, including triage , initial treatment, and transfer to the inpatient ward. Consequently, the quality of service outcomes declines, characterized by low levels of patient satisfaction and increased patient safety risks. The imbalance between input (high patient visits) and output (slow transfers to

inpatient rooms) reflects a failure in the patient flow management system. This not only creates physical and emotional stress for healthcare workers but also increases the likelihood of patient safety incidents (Kusnanto, 2019).

Lean Healthcare theory also supports the results of this study, which emphasizes the importance of process efficiency and waste reduction in hospital service flows, including the ER. (Toussaint & Berry, 2013) . Overcrowding in the ER can be seen as a form of waste in the form of waiting time, unnecessary steps, and psychological stress that negatively impact patient outcomes . Research by Madsen et al. (2014) showed that the application of lean principles in the ER can reduce waiting times by up to 34%. (Madsen, M., Madsen, M., Kirkegaard, H., & Brabrand, 2014). This finding is also consistent with the study of Sun et al. (2013) who showed that overcrowding increases the risk of mortality and worsens patient clinical outcomes. (Sun, BC, Hsia, RY, Weiss, RE, 2013) . Meanwhile, research by V an der Linden et al. (2016) stated that disruptions in the triage process due to crowding hamper early detection of critical patients requiring rapid intervention (Van der Linden, C., Meester, BEA, & van der Linden, 2016).

Another study by Carter et et al. (2014) found that overcrowding impacts the quality of communication between medical personnel, which reduces the effectiveness of decision-making. Research by Morley et al. (2018) also confirmed that overcrowding significantly decreases patient satisfaction and increases staff workload. (Morley et al., 2018) . Meanwhile, Higginson's (2012) study showed a relationship between ER density and an increased risk of adverse events. events (Higginson, 2012) . Research by Widyastuti et al. (2021) and Oktaviani et al. (2022) showed that the implementation of a protocol-based triage system and officer training had an impact on the effectiveness of emergency room management. (Widyastuti, I., Utami, A., & Rahmawati, 2023) (Oktaviani, T., 2022) .

Preparation of a comprehensive SOP for overcrowded ERs, which includes the action flow when ER capacity exceeds safe limits. Optimization of the triage system , including regular training for triage officers so that they are able to screen patients based on their level of emergency accurately and quickly (Astuti, N., & Maulani, 2021). Case placement Manager in the Emergency Room as a coordinating liaison between units and as a facilitator in accelerating the referral process and efficiency of service flow (Prakoso, 2023). Public education through social media, digital brochures, and interactive information boards in hospital areas to increase public literacy regarding the proper and wise use of the IGD. (Pratiwi, S., 2023). Beyond just technical efforts, this solution requires managerial support from hospital leadership to allocate resources, update policies, and build a work culture that adapts to high workloads. It is hoped that the results of this study will serve as a basis for developing emergency care policies that are more oriented toward quality and patient safety.

## CONCLUSION

The emergency department at Urip Sumoharjo Hospital is facing serious service delivery challenges due to overcrowding. The main contributing factors are the high number of visits, limited bed space, and a suboptimal triage system.

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