INDICATORS AS TOOLS FOR ANALYZING THE UNITARIZED MEDICATION REPLACEMENT PROCESS: PROPOSAL FOR OPTIMIZATION IN HIGH COMPLEXITY PUBLIC HOSPITALS

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Introduction

In the context of Hospital Pharmacy, medication distribution in high-complexity hospitals can lead to non-conformities that compromise patient safety. Factors such as the high volume of operations and staff turnover emphasize the importance of managers implementing quality tools to ensure process compliance and safety.

Lean Healthcare is a promising approach for continuous improvement of hospital processes, focusing on the patient and reducing waste to increase added value, as highlighted by Burgess and Radnor (2013). The application of Lean methodology in hospital pharmacy, using practices like Gemba walks and Kaizen events, identifies waste and promotes continuous improvement, optimizing both operations and clinical pharmacy by ensuring the appropriate use of medications [1].

Quality tools are techniques that define, measure, analyze, and propose solutions to problems affecting work process performance, and can be used individually or in combination, such as flow mapping and root cause analysis. Performance measures, such as indicators, communication strategy, and process improvement, serve as measurable parameters that monitor health, service performance, and resource availability, as markers of the work performed [2].

The Pharmacy Service analyzed in this research has its stock replenishment routine for distribution impacted by the vertical organization of work among on-call pharmacists, warehouse staff, and assistants, resulting in variations in prescription fulfillment between shifts. Therefore, this study proposes using indicators to evaluate the prescription fulfillment sector for hospitalized patients, based on the flow of unit-dose medication replenishment in a high-complexity public hospital in Rio de Janeiro.

Material and Methods

The research was conducted through direct observations in the hospital pharmacy environment, focusing on the routines for replenishing unit-dose medications to diagnose the current situation using the Gemba walk methodology.

Based on the diagnosis, it was possible to identify steps in the unit-dose medication replenishment process that could serve as performance analysis tools. Subsequently, indicators were proposed, and their respective technical data sheets were developed.

Results and Discussion

The application of Lean methodology in hospital environments has been expanding to improve the quality of care and optimize internal processes. In healthcare, implemented quality should not only prioritize patient safety but also incorporate conditions that seek improvement through metrics and compliance, promoting continuous improvement in team processes and activities [3].

The observational research, based on the Gemba walk methodology, allowed for the determination of the unit-dose medication replenishment process flow in the sector under study. This made it possible to identify critical points for proposing the indicators.

According to the established workflow, five basic indicators related to the replenishment of unit-dose medication stock were outlined, and technical data sheets for implementation were suggested. The proposed indicators were:

1. inventory error rate - to measure the reliability of the electronic record of medications in stock;
2. stockout rate - to measure the degree of stock depletion for medications;
3. value of expired products - to assess the total value of lost medications due to expiration, financial loss due to expired validity;
4. prescription fulfillment rate: measure the degree of fulfillment of medications requested through prescriptions;
5. and value of medicines dispensed - measure the total value of medicines dispensed by the pharmacy service.

Studies show that hospitals that adopted indicators and a cohesive quality system saw significant improvements in standards, especially when management successfully communicated to the team the importance and proper use of these tools, fostering a cultural shift. This led to a gradual reduction in waste and medication costs, demonstrating that indicators are long-term tools that contribute to the institution's development, adapting to each new reality [4].

Conclusion

The identification and suggestion of improvements in the unit-dose medication replenishment process is essential to ensure effectiveness in hospital pharmacies and to safeguard patient safety. The adoption of strategies for optimizing operational workflows represents a substantial advancement in the management of pharmaceuticals in high-complexity public hospitals.

It is hoped that the recommendations outlined in this study can promote a more effective and safe workflow, benefiting both patients and healthcare professionals, upon their implementation.

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