



# Classification of Interruptions in a Hospital Central Pharmacy

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## Abstract

*Interruptions in the healthcare field are prevalent. They are constantly occurring in central pharmacies within hospitals, and are a major distraction to the pharmacists who are working on vital tasks to prepare and dispense medications. An interruption is considered to be anything that makes the pharmacist stop their work to focus on a different task. This observational research project recorded the interruptions in central pharmacy of a large hospital. Analyzing interruptions can lead to process improvement aims to address issues causing such interruptions.*

## Introduction

Interruptions are often generated via communication devices such as telephones or doorbells that interrupt the pharmacists. Interruptions to the pharmacy professionals while they perform their tasks are major contributors for errors in the pharmacy (Subramoney, 2009). It is known that such medical errors can have grave consequences for patients; therefore, a study of interruptions is necessary to analyze their root causes, reduce/eliminate such interruptions and ensure patient safety (Knudsen, 2007).

## Methodology

Observers recorded the time and duration of interruptions. A stopwatch was used to measure the time. Observation periods lasted anywhere from one hour to eight hours. The observations occurred during six separate time intervals for a total of 1094 minutes. One or two observers were present during each of the time periods.

## Results

Type of Interruption	Frequency (Count)	Duration (sec)
Clarifying Medications	118	100
Transfer Calls	64	25
Missing Medication	49	94
Confirm Orders	114	27
Check up Orders	49	59
Change Medication	14	85
Personal	6	75
Hurry up Calls	24	43

The results of the project validate the existence of an abundant amount of interruptions occurring in the pharmacy. During the observed time period of 1094 minutes, a total of 528 interruptions were observed and recorded. This equates to an average of about one interruption every two minutes.



## Recommendations

One recommendation to reduce the amount of interruptions for pharmacists is to route the incoming calls to the technician's phones first. Therefore, the pharmacist should only be interrupted if there is a question that the technician cannot answer. The next recommendation is to have only one phone ring on one person's desk when a call comes to the pharmacy. Currently, one incoming phone call rings on every technician/pharmacists desk, so everyone is interrupted. If only one phone rings, only that person will be interrupted. Lastly, we recommend eliminating all phone's ringing in the pharmacy by having the workers wear headsets. When a call comes to their desk, the headset will beep and the person will know to pick up their phone. Therefore, no one else will be interrupted by a phone ringing elsewhere.

## Conclusion

Reducing interruptions is imperative because they are considered a cause of human error (Brixey, 2004). This study observed not only the frequency and type of interruption, but also the specific cause. Since clarifying medications is the most frequent type of interruption, the pharmacists should further study how to prevent these interruptions in the future.

## References

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