



Introduction

Interruptions while interpreting imaging studies can lead to decreased efficiency, increased ED patient waiting time, and negatively impact diagnostic accuracy. Radiologists, however, play a crucial role in clinical decision making and must be available for consultation. Phone calls to the reading room are a major source of interruptions. Nonurgent or nonclinical phone call interruptions can lead to increased stress levels and radiologist's burnout.

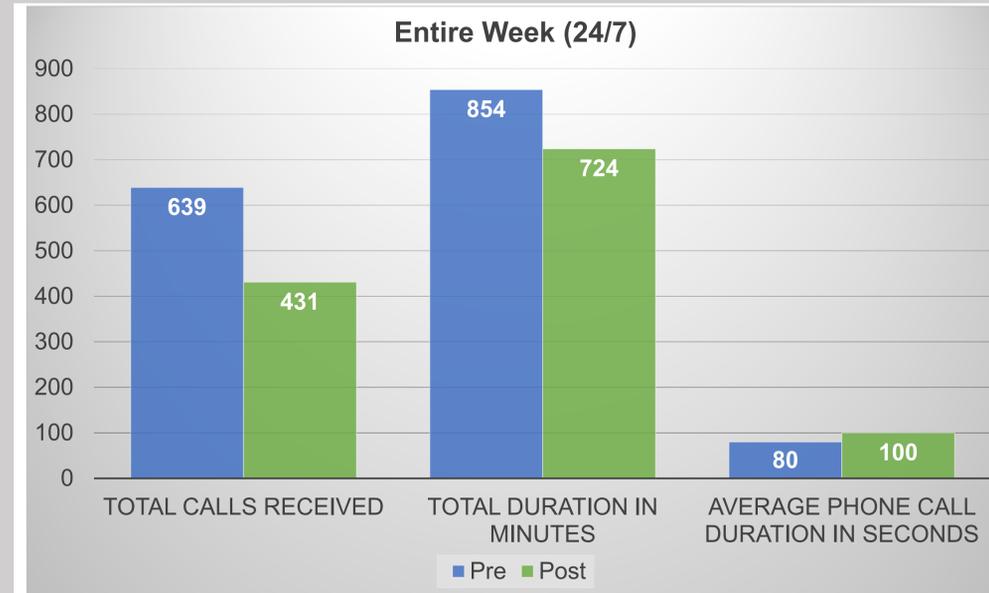
Methods

Data was obtained from our campus network and infrastructure specialist (TM). Calls received to four ED reading room phone lines were captured for a duration of 30 days (7/18 - 8/17/2021). This exploratory data showed a total of 1885 received phone calls. Root cause analysis was performed, and causes were grouped into 4 major categories (below).

Teleradiology related communications was targeted for intervention. We aimed to decrease the total number of phone call interruptions by 30 % by November 2021. This was done through hiring a coordinator to handle Teleradiology related communications. We collected phone records 1 week before and after the coordinator was hired.

Results

The total number of phone calls during the entire week decreased from 639 to 431 (32.5% decrease). The total time spent on the phone decreased from 853 to 724 minutes (15% decrease). During the coordinator shift (3pm-12am) the total number of phone calls has decreased by 27.5% (from 276 to 200) with average time spent on the phone during a single shift decreased from 52 mins to 36 mins (31%).



Discussion

Hiring a coordinator for the Teleradiology communication showed a significant reduction in phone call interruptions. We believe that hiring full time reading room assistant to handle communication to and from the reading room will lead to even significant decrease in interruption and increase radiologist's efficiency.

