

# In-Basket Refill Optimization

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**Background:** Duplicate requests for prescription drug refills commonly occur when automated pharmacy systems generate facsimile requests at the same time as prescription requests occur through other avenues. These avenues include patient portals, telephone messages, voicemails, and face-to-face encounters. These duplicate requests result in mismanagement of staff and clinician time and may lead to refill errors.

**Methods:** A multi-disciplinary team comprised of resident and faculty physicians, resident and faculty pharmacist, medical assistant, and office staff utilized 6-sigma methodology to decrease duplicate refills through automated facsimiles by pharmacies. A 3-week staged intervention began with courtesy notification to pharmacy that after the immediate refill, no subsequent facsimile-generated refills would be honored. Simultaneously, all clinical and clerical staff were notified of proposed intervention and educated about standardized processes for prescription refills. Next, patients were educated about changes in refill procedures by mailed letters and face-to-face notification during office encounters. Finally, all subsequent facsimile requests were re-faxed to pharmacies with denial notification.

**Results:** The week prior to intervention, of the total prescription requests, 32% were duplicates. The week following the end of intervention, of the total prescription requests, 5% were duplicates.

**Conclusions:** This rapid cycle PDSA intervention changed refill procedures and successfully decreased duplicate prescription refill requests to marginal numbers. We hypothesize that cessation of automated refills will trigger patients to be more aware of their refills and require increased engagement in their own healthcare. Clinicians have also been trained to maximize the clinically appropriate refills to not only help reduce inbox burden but also use the received refill requests to serve as a reminder for when a patient may be due for an appointment. With the education to patients we hope that when a patient is out of refills it is mutually understood that clinically it is felt that the patient would benefit from a chronic disease management appointment. Currently a significant amount of medication management and health maintenance occurs when patients come in for an acute complaint visit which results in less time being able to be dedicated to these chronic conditions which often have more significance on a patient's overall health. By engaging with patients more at chronic disease management appointments we hope to provide patients with more education and active management of their chronic diseases. It is our hope that this will strengthen patient-physician relationships and improve patient follow-up, and ultimately improve patient's autonomy and knowledge of their medications. Discontinuing automatic refill generations that commonly occur in primary practices will improve efficacy and improve patient safety and quality of care.