



Using Automated Patient Engagement Services for Enhanced Medication Adherence, Persistency and Operational Efficiency in Specialty Pharmacy

A Comprehensive Study





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Abstract

This whitepaper presents a comprehensive study highlighting the transformative impact of an automated patient engagement service utilizing SMS and email for proactive and self-serve engagement, on medication adherence, persistency and operational efficiency in a specialty pharmacy. Focusing on patients with rheumatoid arthritis and asthma, the study analyzed Lumicera Health Services Specialty Pharmacy patient data from both CassianRx-enrolled and non-enrolled patients over a 3-month period. The results demonstrate significant improvements in Proportion of Days Covered (PDC), persistency rates, and pharmacy turnaround time (TAT). This study emphasizes the potential to drive positive health outcomes, patient empowerment, and optimized pharmacy operations.

Introduction

Improving patient medication adherence and pharmacy efficiency is a pivotal goal for Lumicera Health Services. Evidence-based literature has revealed that medications adherence is a major contributor to disease activity and patient quality of life outcomes in rheumatoid arthritis and asthma.^{1,2} Additionally, improving the turnaround time (TAT) of specialty pharmacy prescriptions is another crucial factor to ensure patients access to their medications in a timely manner avoiding gaps in therapy.³ Beyond that, improved adherence, persistence, and TAT have a direct impact on reducing healthcare expenses, it was estimated that the annual health care costs attributable to non-adherence in the United States to be \$100–\$300 billion.⁴ Lumicera Health Services, along with CassianRx, led coordinated efforts introducing a cutting-edge approach by leveraging automated SMS and email communication to foster proactive and self-serve patient engagement in efforts to mitigate barriers to medication access and adherence while reinforcing therapy persistence.

This white paper delves into the outcomes of a comprehensive study that assessed the impact of medication adherence, persistency rates, and pharmacy turnaround time among patients with rheumatoid arthritis and asthma.



Lumicera implemented Cassian Rx's automated patient digital engagement platform that delivered personalized SMS and email reminders.

Methodology

The study encompassed patients with rheumatoid arthritis and asthma and spanned over a three-month timeframe. Patients were categorized into two groups: those enrolled in the portal and those who were not. Medication adherence, measured by PDC, persistency rates, and pharmacy operational efficiency, measured by TAT, were the selected outcomes to be evaluated being among the main determinants of treatment success. Statistical analysis was conducted to validate the significance of the observed changes.

Implementation

CassianRx provided an automated engagement platform that delivered personalized SMS and email reminders, promoting proactive medication adherence and empowering patients with self-serve engagement tools. Patients could access refill information and medication schedules through the CassianRx portal, creating a holistic engagement ecosystem.

Results

The results of the study substantiate the efficacy of patient engagement in enhancing patient outcomes and pharmacy operations:

- Medication Adherence (PDC): Among patients with rheumatoid arthritis, PDC increased significantly from an average of 92.1% to 94.7%, with a P-value of 0.0. For asthma treatment, PDC improved from 91.6% to 94.7%, also with a P-value of 0.0.
- Persistency Rates: The study revealed an increase in persistency rates for both conditions. In rheumatoid arthritis, persistency improved from 93.7% to 96.2%. In asthma conditions, persistency increased from 93.9% to 96.7%.
- Pharmacy Turnaround Time: The specialty pharmacy experienced a reduction in turnaround time. For rheumatoid arthritis, the time decreased from 7.7 days to 7.3 days. In asthma cases, the turnaround time was significantly reduced from 8.9 days to 4.9 days.

The automated service empowers patients to take a proactive role in their treatment journey



Discussion

The study outcomes underscore the transformative potential of engaging patients. The automated service empowers patients to take a proactive role in their treatment journey, leading to improved medication adherence and persistency. Moreover, the streamlined communication and self-serve capabilities contribute to operational efficiency gains, as demonstrated by reduced pharmacy turnaround time.

Implications

The impact extends to patient outcomes, patient engagement, and pharmacy operations. Given the findings of this study, the integration of technology to specialty pharmacies workflow will support their patient care delivery at different levels. The improved medication adherence and persistency can mitigate disease progression, reduce therapy discontinuation rates, comorbidities, and associated healthcare costs. Enhanced pharmacy efficiency improves patient satisfaction and resource utilization.

Conclusion

The study showcases the holistic benefits of patient engagement, from bolstering patient medication adherence and persistency to optimizing pharmacy operations. The data-driven insights validate the positive impact of proactive and self-serve patient engagement through SMS and email. The CassianRx platform emerges as a vital tool in elevating patient outcomes and pharmacy performance.

Future Directions

Future research could explore the long-term sustainability of improvements and the potential applicability of this tool to diverse healthcare settings and chronic conditions. Gathering patient feedback on their engagement experience could provide additional insights.



References

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