Advancing Pharmacy Practice Through Treatment Selection: A Pharmacist-Driven COVID-19 Outpatient Treatment Referral Process

Julia Landis, PharmD, BCPS; Elizabeth Jacob, PharmD, BCPS; Ashton VanDyke, PharmD, MSHI, BCPS

Kettering Health, Kettering Ohio

Since November 2020, several therapeutics have been granted emergency use authorizations (EUAs) for the treatment of non-hospitalized adult patients with mild to moderate Coronavirus disease 2019 (COVID-19). Each treatment was shown to reduce hospitalization and death in high-risk patients.[1] Successful distribution of these therapeutics is key to reducing strain on the healthcare system and improve patient outcomes. However, several logistic and clinical nuances make timely and accurate treatment selection challenging. Our pharmacist-driven COVID-19 outpatient treatment referral process simplified ordering for providers and leveraged pharmacist expertise to identify and procure the most safe and effective treatment based on the National Institute of Health's (NIH) recommendations, inventory, and EUA criteria.

Centralizing outpatient COVID-19 treatment management addressed the complex clinical considerations of each therapy and provided an internal inventory management system that guaranteed patients access to therapy at the most convenient location for them. A custom referral form was created that unified eligibility criteria across all treatment options and filtered them based on symptom onset. The referral form was quickly modified as the pandemic evolved and updated based on inventory and variant emergence. Providers indicated patient eligibility and "opted-in" for the treatment choices they wanted considered for their patients: monoclonal antibodies (mAbs), Paxlovid (ritonavir-boosted nirmatrelvir), molnupiravir, and remdesivir. Pharmacists would review the referral to confirm eligibility and identify the most appropriate therapy per a Pharmacy and Therapeutics approved algorithm based on NIH and EUA guidance. Orders were then sent to our established internal pharmacy services. Patients received mAb infusions at our COVID-19 infusion center and oral prescriptions were sent to our retail and long-term care pharmacies for dispensation and counseling. A group was created in our secure virtual communication platform which allowed real-time communication between departments. Data oversight was managed by a dashboard which was used to monitor key metrics such as volume, turnaround time, and interventions.

Pharmacists reviewed 2,900 referrals between the time of implementation on January 24, 2022 and June 30, 2022. All treatment options were chosen in 52.7% of referrals and 80.3% had multiple selected. Pharmacists utilized dispense reports within the health record and patient telephone encounters to reconcile medication histories when providers opted for Paxlovid review (n = 2,606). In total, 1,621 (62.2%) referrals ended with a pharmacist ultimately selecting Paxlovid. Of the remaining 985 referrals, 669 (67.9%) patients had drug-drug interactions that precluded them from Paxlovid treatment. Pharmacists were able to efficiently navigate the complex treatment decision pathway and complete referrals with an average turnaround time of 4 hours and 39 minutes.

The COVID-19 treatment referral program has proven to be highly successful at addressing several challenges associated with outpatient treatment selection for patients with COVID-19 including fair allocation of resources, patient access to inventory, and drug-specific considerations through a pharmacist-driven and collaborative approach to care.

References:

1. Food and Drug Administration. Emergency Use Authorization; 2022. Accessed July 23, 2022. https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization