

AllianceRx Walgreens Prime study demonstrates favorable adherence, but high cost for cystic fibrosis patients prescribed modulator medications

Findings presented at Academy of Managed Care Pharmacists (AMCP) Nexus, ISPOR Europe conferences

ORLANDO, Fla. – Nov. 5, 2019 – AllianceRx Walgreens Prime and Duquesne University School of Pharmacy recently announced results from research analyzing data from cystic fibrosis (CF) patients prescribed cystic fibrosis transmembrane conductance regulator (CFTR) modulator medications. Researchers wanted to understand if patients took their medications as prescribed, as well as the financial impact of the medications on patients. While the findings showed positive adherence to the medications, they also revealed a substantial financial burden on both patients and third-party payers attributable to the medications.

Cystic fibrosis is a progressive, genetic disease that causes persistent lung infections and limits the ability to breathe over time. Cystic fibrosis is caused by changes in the CFTR gene. In people with CF, changes in this gene can disrupt the normal production or functioning of the CFTR protein found in the cells of the lungs and other parts of the body. Patients with CF experience excessive mucus build up and infections leading to complications in the pancreas, lungs, and other organs. Since the introduction of the first CFTR modulator in 2012 and subsequent CFTR modulator approvals, these medications have significantly changed the treatment of CF.

“CFTR modulator therapies are relatively new in the treatment of CF and address the underlying cause of the disease,” says Richard T. Miller, M.S.Pharm., M.B.A., R.Ph., C.S.P., vice president of clinical and professional services at AllianceRx Walgreens Prime and an author of the study. “As such, they have the potential to change the treatment of CF. It is important to understand how patients are adhering to these newer therapies.”

For the study, researchers used prescription refill and patient assessment data from a national specialty pharmacy database. They analyzed data of patients using CFTR modulator therapies (ivacaftor, lumacaftor/ivacaftor and tezacaftor/ivacaftor) between September 2017 and August 2018, and calculated adherence using proportion of days covered (PDC) measurement.

Of the 3,482 patients using CFTR modulator therapies, 50.8% of patients were on lumacaftor/ivacaftor followed by tezacaftor/ivacaftor (24.8%) and ivacaftor (24.4%). The PDC values for the CFTR modulator therapies was above 80%, signifying patients were adherent to the newer therapies, according to Miller.

“This data indicates patients are maintaining a high level of adherence to the CFTR modulators,” said Miller. “Better adherence may help patients control their CF symptoms, as well as potential disease progression and future healthcare costs,” he added. Miller said additional studies are necessary to determine the overall benefit of CFTR modulators on controlling CF and improving CF patients’ quality of life.

While greater adherence to CFTR modulators was a positive finding of the study, researchers also sought to understand the financial impact of these agents on both patient and payer.

“To understand the trends associated with the utilization of CFTR modulator therapies, we need to estimate drug copays borne by the patients,” says Khalid M. Kamal, M.Pharm., Ph.D., professor at Duquesne University School of Pharmacy and an author of the study. “This will help us understand the association with outcomes such as medication adherence.”

Researchers analyzed prescription refills, insurance characteristics and patient copays from January 2015 to August 2018. During that period, a total of 4,444 patients contributed to 57,960 refills of CFTR modulator therapies. Notable among the findings:

- Most refills (62%) were for patients with only primary insurance whereas about 37% of refills were for patients with both primary and secondary insurances;
- Overall, researchers observed a fluctuation in average monthly patient copay with a high of \$312.70 (2018) and a low of \$182.05 (2016);
- Researchers noticed an upward trend in the annual spending on lumacaftor/ivacaftor with \$67 million in 2015, and increasing to \$281 million in 2017. However, the spending on ivacaftor remained constant over the years with \$103 million spent in 2015 and \$119 million in 2017.

“Evidence shows higher copays are associated with lower patient adherence and adverse clinical outcomes,” says Dr. Kamal. “Thus, there is a need to monitor these characteristics in CF as well to understand the impact of copays across different insurances and patient outcomes.”

Miller presented his [findings on CF and adherence](#) at [AMCP Nexus](#), Oct. 31, in National Harbor, Md. Dr. Kamal presented his [findings on CF and its economic burden](#) at [ISPOR Europe](#), Nov. 5, in Copenhagen, Denmark.

About AllianceRx Walgreens Prime

AllianceRx Walgreens Prime (alliancerxwp.com) is a specialty and home delivery pharmacy that strives to provide exceptional care throughout a patient’s treatment journey with the medications they need every day. Formed in 2017 through a collaboration between Walgreens, one of the nation’s largest chain drug stores, and Prime Therapeutics, a leading pharmacy benefit manager, the company offers tools and resources for patients, providers and health plans to deliver the optimal health outcomes. The company is headquartered in Orlando, Fla. and its pharmacies are accredited by several national pharmacy accreditation services.

About Duquesne University

Founded in 1878, [Duquesne University](#) is consistently ranked among the nation's top Catholic universities for its award-winning faculty and tradition of academic excellence. Duquesne, a campus of nearly 9,500 graduate and undergraduate students, has been nationally recognized for its academic programs, community service and commitment to sustainability. Follow Duquesne University on [Facebook](#), [Twitter](#) and [Instagram](#).

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