Medicaid programs have limited hepatitis C virus (HCV) direct-acting antiviral (DAA) access to patients with advanced liver fibrosis, citing regimen costs, limited state budgets, and a large burden of HCV patients as a necessity to prioritize patients.1

The Meta-analysis of Histological Data in Viral Hepatitis (METAVIR) is an ordinal scale for quantifying the amount of scar tissue and inflammation in the liver. The METAVIR scale is commonly used in HCV clinical trials to delineate patient cirrhosis status and determine optimal treatment regimens. Fibrosis scores can range from 0 to 4 with 0 representing no fibrosis and 4 representing cirrhosis.2,3

For Oklahoma, the minimum METAVIR fibrosis score requirement was lowered from F2 to F1 effective July 1, 2017 and from F1 to F0 effective January 1, 2018.4

Background

Objectives

The objective of this analysis was to assess trends in HCV DAA utilization following the removal of a minimum METAVIR fibrosis score requirement.

Methods

Since July 2014, Pharmacy Management Consultants (PMC), the pharmacy benefit manager for Oklahoma Medicaid has administered a high-touch, HCV prior authorization management program (PAMP).

This analysis used administrative claims data from Oklahoma Medicaid for members with a submitted prior authorization for a DAA during the study period January 1, 2016 to October 15, 2018.

The HCV PAMP for DAAs requires clinicians to provide additional clinical touch, HCV prior authorization management program (PAMP).

Since July 2014, Pharmacy Management Consultants (PMC), the pharmacy benefit manager for Oklahoma Medicaid has administered a high-touch, HCV prior authorization management program (PAMP).

This analysis used administrative claims data from Oklahoma Medicaid for members with a submitted prior authorization for a DAA during the study period January 1, 2016 to October 15, 2018.

The HCV PAMP for DAAs requires clinicians to provide additional clinical

The percentage of noncompliant members increased in the F0 period as roughly 7 months after removal of minimum fibrosis score requirements, the number of DAA claims, and members utilizing DAAs, respectively.

In the 2nd and 3rd quarters of 2018, reimbursement, claims, and members declined to similar totals experienced in June 2017, just prior to the initial fibrosis score change.

Reimbursement, Number of Claims, Number of Members

Above is a line graph representing the monthly trend in reimbursement, number of claims, and number of members utilizing HCV medications from January 2016 to October 2018.

A steep increase in all parameters can be seen following the minimum METAVIR fibrosis score change of F2 to F1 (July 1, 2017), and again following the change to F0 (January 1, 2018).

Totals for January and February 2017 in comparison to January and February 2018 resulted in a 38.28%, 55.21%, and 66.08% increase in reimbursement, the number of DAA claims, and members utilizing DAAs, respectively.

In the 2nd and 3rd quarters of 2018, reimbursement, claims, and members declined to similar totals experienced in June 2017, just prior to the initial fibrosis score change.

Compliance

The difference in the percentage of members noncompliant to therapy was statistically significantly greater in the F0 period compared to the F2 period.

Results

Treatment Length and Fibrosis Score

Removal of fibrosis score requirements resulted in increases in reimbursement, claims, and members in the months immediately following the change.

Roughly 7 months after removal of minimum fibrosis score requirements, reimbursement and utilization returned to levels similar to the pre-period.

The percentage of noncompliant members increased in the F0 period as compared to the F2 period but not in the F1 period.

The average DAA treatment regimen length decreased following removal of fibrosis score requirements resulting in a decrease in the cost per member.

Similar trends might be expected for other states considering removal of minimum fibrosis score requirements.

Conclusions

Disclosure Statement

All authors disclose contractual work for the Oklahoma Health Care Authority. Additionally, Keast and Holderread disclose unrelated funding through an unrestricted research grant from AbbVie, Amgen, and Otsuka American Pharmaceutical. Keast also acknowledges unrelated funding from Purdue Pharma for a research fellowship grant.

References

1. Holderread B, Johnson KC, Thompson CT, et al. Medicaid programs have limited hepatitis C virus (HCV) direct-acting antiviral (DAA) access to patients with advanced liver fibrosis, citing regimen costs, limited state budgets, and a large burden of HCV patients as a necessity to prioritize patients. 2019;163:226-236.

2. Seeff L, Hoover N, Thomas DL, et al. The Meta-analysis of Histological Data in Viral Hepatitis (METAVIR) is an ordinal scale for quantifying the amount of scar tissue and inflammation in the liver. The METAVIR scale is commonly used in HCV clinical trials to delineate patient cirrhosis status and determine optimal treatment regimens. Fibrosis scores can range from 0 to 4 with 0 representing no fibrosis and 4 representing cirrhosis. 2018;97:73-79.
