Impact of Sofosbuvir on Utilization and Expenditure of Hepatitis C Medications in a Medicaid Population

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AMCP Nexus 2014 • Boston, MA

BACKGROUND
- Hepatitis C affects approximately 3.2 million people in the United States. It is estimated that the prevalence of Hepatitis C is doubled in the Medicaid population versus the commercial population.
- The approval of sofosbuvir (Sovaldi®) in December 2013 for the treatment of chronic Hepatitis C offers improved efficacy and tolerability over other Hepatitis C regimens at a significantly greater cost. Clinical trials have shown Sovaldi to have a cure rate of about 89 – 95%.
- The cost of sofosbuvir itself is around $84,000 for a 12-week course; Sofosbuvir accounts for approximately 90% of the overall Hepatitis C population versus the commercial population.
- The anticipation of greater efficacious therapies has led physicians to defer treatment for some patients, a phenomenon called “warehousing.”
- Descriptive statistics were used to assess results.

OBJECTIVE
- To evaluate the impact of sofosbuvir on utilization and expenditure, along with pattern of Hepatitis C treatment regimens in a Medicaid population.

METHODS
- A large state government database of pharmacy claims (greater than 1M lives) was used to identify Hepatitis C patients based on claims for Hepatitis C therapies (i.e. peg interferon, ribavirin, telaprevir, boceprevir, sofosbuvir, and simprevir) between January 1, 2013 and June 30, 2014.
- To assess duration of sofosbuvir based regimens, Hepatitis C patients continuously enrolled between December 1, 2013 and June 30, 2014 were evaluated.
- Clinical outcomes were considered to assess the true economic impact of sofosbuvir.
- Utilization, expenditure, and Hepatitis C prescribing patterns were evaluated for this population before and after approval of sofosbuvir.
- The pre-period for direct comparison was June 1 to November 30, 2013. The post-period for direct comparison was December 1, 2013 to May 31, 2014.
- Claims volume and plan cost was used to evaluate utilization and expenditure, either as percent of total drug cost or per member per month (PMPM) cost.
- No clinical outcomes were considered to assess the true economic impact of sofosbuvir.

RESULTS
- Utilization, expenditure, and Hepatitis C prescribing patterns were evaluated for this population before and after approval of sofosbuvir.
- The pre-period for direct comparison was June 1 to November 30, 2013. The post-period for direct comparison was December 1, 2013 to May 31, 2014.
- Claims volume and plan cost was used to evaluate utilization and expenditure, either as percent of total drug cost or per member per month (PMPM) cost.
- To assess duration of sofosbuvir based regimens, Hepatitis C patients continuously enrolled between December 1, 2013 and June 30, 2014 were evaluated.
- Descriptive statistics were used to assess results.

CONCLUSION
- Sofosbuvir has shifted the paradigm for the treatment of chronic Hepatitis C, with 90% of new patients starting on a sofosbuvir-based regimen.
- This change in prescribing behavior, along with greater numbers of Hepatitis C patients receiving therapy, has significantly impacted overall pharmacy expenditure.
- Patients who were previously “warehoused” most likely contributed to the significant increase in the number of patients starting Hepatitis C therapy.
- It is unclear what the continued impact on utilization and expenditure will be as other drugs in the Hepatitis C pipeline, considered to be equally efficacious and safe, are approved in the upcoming months.
- Further research is needed to assess the real-world impact on sustained viral response rates and clinical outcomes, to determine the overall cost-effectiveness of sofosbuvir.

REFERENCES

DISCLOSURES
- This research was conducted by Magellan Rx Management, Glen Allen, VA, without external funding.