Advancements in the screening and treatment of Hepatitis C virus (HCV) infection, while referral to a specialist had higher probability of linking care. In 2013, among the 179,144 persons with HCV antibody (AB) positive test, increases in HCV antibody testing with HCV RNA testing over time may have influenced the use of reflex testing in 2016. This is the largest study assessing real-world HCV linkage to care in the United States (US) having seen specialist was associated with much higher probability of treatment (32.0% for baby boomers and 22.6% for young adults) compared to post PCP. The opposite was observed among baby boomers in 2016, with a larger number of states exceeding the average treatment rate post specialist visit compared to post PCP. The study used a comprehensive dataset derived by combining clinical tests results and patient characteristics from 2 large national laboratories, as described in previous literature. The HCV linkage of care cascade was defined as: HCV antibody (screening), HCV RNA (diagnosis). Seeing HCV specialist (gastroenterology/hepatology/infectious disease) or primary care physician PCP (general practitioner/family medicine/internal medicine), and receiving HCV treatment. The analysis was limited to patients that undergone HCV antibody (AB) screening. Patients who tested AB positive and were administered HCV RNA test were longitudinally assessed to determine the steps of the care cascade they completed. Given the evolving disease epidemiology with the influx of young newly infected people, the analysis was stratified by two age cohorts: baby boomers 48-71 years old and young adults 18-39 years old. The care cascade was delineated for 2013 compared to 2016 by age cohort and by patient's state of residence.

RESULTS CONTINUED

Figure 1. Linkage to Care in 2013 vs. 2016 in the United States

Figure 2. Received Treatment After PCP Visit by Age Cohort and by State, Year 2016

Figure 3. Received Treatment After Specialist Visit by Age Cohort and by State, Year 2016

DISCUSSION

Despite the more than double increase in PCP's treatment rate in baby boomers from 2013 to 2016, PCP treatment rates were substantially lower than those seen among patients treated by specialist. Undiagnosed and untreated young adults represent a growing proportion of the chronic HCV patients and addressing gaps in care among young patients is essential to treating HCV infection. These findings suggest that health systems need to not only redouble efforts to diagnose and treat baby boomers, but also develop additional screening efforts among younger patients.

LIMITATIONS

There is a chance that a patient may appear in both laboratory datasets; however, this data is limited to those with a positive HCV RNA viral load test.

Patients identified as HCV RNA positive in 2016 may not have had enough follow up time to initiate HCV treatment.

Patients of certain states were of small sample size resulting in wide confidence intervals for the estimate of proportion treated. The treatment results by state in 2016 were heterogeneous (Figure 2 & 3).

Among young adults in 2016, a larger number of states exceeded the average treatment rate post specialist visit compared to post PCP. The opposite was observed among baby boomers in 2016, with a larger number of states exceeding the average treatment rate post PCP visit compared to post specialist.

CONCLUSION

This is the largest study assessing real-world HCV linkage to care in the US from 2013 through 2016. Linkage to HCV specialist remains a large hurdle in the HCV care cascade, especially in those young patients at highest risk to transmit HCV. WHO elimination goals are unattainable at current rates of linkage to HCV care in the US; there are notable areas in the care cascade that should be addressed to increase the number of patients who receive treatment.

REFERENCES

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