

Optimize Hepatitis C Treatment

Geisinger Health Plan: Dansville, PA

Chronic Hepatitis C virus (HCV) affects an estimated 3.5 million Americans, making it the most common blood-borne disease in the U.S. It can range in severity from a mild illness lasting a few weeks to a serious, lifelong disease that attacks the liver. Vaccines are available to protect against Hepatitis A and B, but there is no vaccine against HCV. The Centers for Disease Control and Prevention estimates that baby boomers (those born between 1945 and 1965) account for 75 percent of chronic HCV infection and are at a much greater risk of HCV-related complications.¹

Approximately 70 to 80 percent of people infected with HCV do not have symptoms, which makes routine testing important. Left untreated, HCV can result in chronic liver disease, liver failure, liver cancer or even death.²

The evolution of pharmacotherapy to treat HCV over the past five years has been dramatic, with new drugs on the market that can cure HCV in upwards of 90 percent of patients. The drugs come with a huge price tag: the initial launch price was nearly \$100,000 for a 12-week course of treatment.

Recognizing these challenges, clinical and health plan leaders at Geisinger Health Plan created a robust protocol for the diagnosis and treatment of HCV.

Bring Everyone to the Table

Geisinger brought health plan and delivery system stakeholders to the table to develop a CarePath for HCV. This team included pharmacy leaders, health plan medical directors, service line physician leaders, nurses, case managers, IT and data experts and benefits managers. Together, the team developed clinical and operational best practices using the most recent clinical evidence.

Together, the team created standard treatment algorithms and clinical informatics tools to ease administrative burdens and increase data transparency. Updates to the care pathway were communicated rapidly to the health plan, allowing for efficient prior authorization of treatments. The subsequent HCV CarePath was built into the delivery system's electronic health record, recommending steps from initial diagnosis to downstream specialist referrals.

Use Specialty Expertise for Clinical Decision-Making

A central focus of the HCV CarePath program has been simplifying and streamlining treatment. Previously, HCV patients would see a hepatologist three to five times during the 12 to 24-week course of antiviral treatment, heavily burdening this specialty schedule. The biggest change brought about by the HCV CarePath, is the use of hepatologists not as the primary physician who manages all aspects of the HCV treatment but instead as a clinical expert who sees the patient

once and, based on lab results, determines the customized treatment plan. Ongoing care and care management is then provided by a multidisciplinary HCV team via telephone and through Geisinger's online patient portal. This move enhances patient-provider connections and reduces the need for additional in-person visits.

Leverage Pharmacists' Expertise

The HCV CarePath program is able to use data and call on specialists from Geisinger's Medication Therapy Disease Management (MTDM) program, an ambulatory care pharmacy program launched in 1996. The program leverages pharmacists' expertise to optimize care and improve outcomes. Today, MTDM program pharmacists are trained and credentialed to manage more than 16 conditions, including Hepatitis C.

The program's successful population health management track record — such as fewer emergency department visits and hospitalizations and lower costs for patients with atrial fibrillation — has smoothed the way for the integration of pharmacists onto clinical care teams.

Provide Feedback through System Dashboard

A system dashboard linked to the delivery system's electronic health records provides data on treatment of patients with HCV at both the population and the individual patient level. Users can sort data based on: genotype and fibrosis; co-morbidities; co-infections; history of addiction; starting virology level; drug regimen; number of visits to the HCV clinic; and other details including adherence to regimen. Care teams can see the progress of HCV patients and the cure rate.

Importantly, pharmacy data is also included in the electronic health record, thanks to linkages built with Geisinger's retail pharmacies. If a patient fails to fill his or her prescription according to the regimen, the pharmacist alerts the HCV team, which reaches out to the patient to troubleshoot.

The rich data on HCV treatment and outcomes informs continuing refinements to the CarePath to maximize patient access and adherence to treatment. It also helps the health plan appropriately match benefit design and the drug formulary to best practice.

For example, in the course of the project, Geisinger researchers determined that the original 12-week course of therapy was not necessary and therefore scaled back to an eight-week treatment regimen. This change resulted in cost savings of \$30,000 per patient per month. By sharing with providers the economic benefit of the updated treatment plan, Geisinger was able to obtain strong clinician buy-in and consensus.

“When we focused on efficacy and total cost of care, we found a shorter treatment plan provided the same patient outcomes. Allowing us to use fewer doses of a preferred drug reduces costs by 30 percent. That means for every two patients we treat, the third is free.”

Dr. John Bulger, Geisinger Health Plan

Results

Geisinger has treated more than 2,000 patients using the HCV CarePath, with an overall cure rate of 97.5 percent. In contrast, data from a recent study reveals that 12 weeks after treatment was completed, the virus was undetectable in 56 percent of those treated in non-Geisinger facilities. The respective rates of “loss to follow-up” — patients who drop out of treatment — were 3.6 percent and 44 percent.³

Additional benefits derive from the replicability of the HCV CarePath. The model is now being used effectively to treat psoriasis, macular degeneration and multiple sclerosis.

Sources

1. Centers for Disease Control and Prevention. Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945–1965. August 17, 2012. <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6104a1.htm>
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3. NEJM Catalyst. Enhanced Cure Rates for HCV: Geisinger’s Approach. July 11, 2018. <https://catalyst.nejm.org/geisinger-provencare-hcv-cure/>