Out-of-pocket costs play major role in treatment adherence for cancer patients

January 6 2014

The cost of insurance co-payments for cutting-edge pharmaceuticals can vary widely from patient to patient. When the patient's share of prescription costs becomes too high, many patients skip doses or stop taking medication entirely, according to research conducted at the University of North Carolina.

Using data from health plan claims for the anti-cancer drug imatinib filed between 2002 to 2011, Stacie B. Dusetzina, PhD, research professor at the UNC School of Medicine and Gillings School of Global Public Health and member of the UNC Lineberger Comprehensive Cancer Center, found that patients with higher co-payments were 70 percent more likely to stop taking their cancer treatment and 42 percent more likely to skip doses. The study, published by the *Journal of Clinical Oncology* is one of the first to examine the effect of high out-of-pocket drug costs for targeted cancer therapies on patients.

Dusetzina, along with colleagues from UNC, Harvard and the Dana-Farber Cancer Institute, used health plan claims from privately-insured adult patients (ages 18 to 64) from 2002 and 2011 to examine the relationship between out-of-pocket costs for imatinib, marketed under the trade name Gleevec in the United States, and patient adherence. The data showed that insurance co-payments for imatinib ranged from nothing to $4,792 for a 30-day supply of the medicine, with the costs increasing over the study years.

Imatinib is one of the major success stories of modern pharmaceutical

development. Before the development of the drug, a patient with the white blood cell cancer chronic myeloid leukemia (CML) had a grim prognosis, with only 30 percent surviving more than five years after diagnosis.

With the advent of imatinib, the five-year survival rate rises to 89 percent so long as patients adhere to the prescribed treatment plan. Evidence suggests that patients missing even 15 percent of prescribed doses can relapse, as the cancer develops resistance to the drug.

"Imatinib is an expensive drug, but it is a great example of a drug where there is not a lot of confusion about which patients will benefit. Most patients with CML will benefit. However, individuals need to take it almost perfectly, and not taking it can have severe medical consequences," said Dusetzina. "So maximizing adherence is crucial."

The data used in the study only included patients on employer-based plans. Most individuals had low out-of-pocket costs - the most common cost was $30 for a 30 day supply, but copayments and co-insurance amounts required of patients varied substantially.

"We studied people who are part of large employer groups, so their insurance is probably more generous than someone who is buying insurance on a private market that does not have a lot of negotiating power," said Dusetzina.

Monthly co-payments for imatinib from patients in data used by the study averaged $55 in 2002 and $145 in 2012, with 6.4 percent paying more than $500 a month. The combined monthly costs of the drug to the insurance company and patient increased from 2,798 to $4,892 over the same period. The data did not include patients who were not able to afford to pay to begin taking the drug, which leads Dusetzina to believe that the study underestimates the effects of drug costs on adherence.

"If you went to the pharmacy to obtain your prescription and they said it was $5,000 and you walked away because you couldn't afford to pay, you're not in the data; we could only study individuals who filled at least one prescription," said Dusetzina.

Dusetzina said that the data has implications beyond imatinib. The cost of many new pharmaceuticals for rare conditions can cost insurers and patients more than $100,000 year.

"Our results are particularly relevant for specialty pharmaceutical products, those that cost over $10,000 a month, however, the lessons learned likely relate to any pharmaceutical product that has high out of pocket costs," said Dusetzina. "It is important that we identify strategies to make effective but expensive medications more affordable to patients ."

Provided by University of North Carolina Health Care

Citation: Out-of-pocket costs play major role in treatment adherence for cancer patients (2014, January 6) retrieved 9 May 2024 from https://medicalxpress.com/news/2014-01-out-of-pocket-major-role-treatment-adherence.html