The Impact of Price Reduction on Access to Medicine for Non-Communicable Diseases in Kenya

Non-communicable diseases (NCDs) like diabetes, hypertension, and cancer have become increasingly prevalent in low- and middle-income countries in recent years, but health systems in most of these countries have been geared towards treatment of acute rather than chronic diseases. In Kenya, researchers are evaluating the impact of Novartis Access, an initiative that offers a basket of NCD medicines at a reduced wholesale price, on the availability and purchase price of medicines.

Policy Issue

Over the last two decades, the global prevalence of non-communicable diseases (NCDs) like diabetes, hypertension, and cancer has increased significantly. Reasons for this increase include population aging and increased exposure to risk factors such as tobacco use, harmful use of alcohol, physical inactivity, and unhealthy diets. Globalization and rapid urbanization, meanwhile, have accelerated the exposure to these risk factors.

Treatment of NCDs and prevention of complications largely depends on medication, but health systems in most low and middle-income countries have been geared towards treatment of acute rather than chronic diseases. These countries now face tremendous challenges in managing growing NCD burdens. For patients, out-of-pocket spending can result in catastrophic health expenditure and increased poverty. In addition to their direct medical costs to patients, NCDs can be a burden on the countries’ economies.

This research will provide rigorous evidence of the impact of a new medicine access program called Novartis Access. The evidence will inform Novartis’ efforts to improve their program in Kenya and in subsequent countries as it is rolled out globally in the coming years.

Evaluation Context

The increasing prevalence of NCDs is a significant health concern in Kenya. NCDs account for 27 percent of deaths among people between ages 30 and 70. More than 50 percent of inpatient admissions and 40 percent hospital deaths result from these diseases. In Kenya, medicines are purchased by either public, private non-profit, and private for-profit health facilities, where patients
then obtain them. Patients at private for-profit facilities generally pay medicine costs out-of-pocket, while at public and non-profit facilities they may pay the full price or a partial “cost-recovery fee.” According to a household survey conducted in 2008, only 33% of respondents who reported being diagnosed with an NCD had medicine for that condition available in their house at the time of the survey.\(^6\)

The pharmaceutical company Novartis/Sandoz has introduced a new global initiative, \textit{Novartis Access}, that offers a basket of 15 medicines for the treatment of NCDs at a reduced price in 30 countries, including Kenya, by 2020. Initial rollout of the program began in Kenya in 2016, and additional countries will be added in the coming years. The main activity of \textit{Novartis Access} is the direct sale of reduced price NCD medicines to wholesale purchasers in program countries. In Kenya, the basket of medicines focuses on 4 NCDs: cardiovascular disease, diabetes, breast cancer, and respiratory illness.

**Details of the Intervention**

Researchers working with Innovations for Poverty Action are conducting a randomized evaluation to study the effects of \textit{Novartis Access} on the availability and purchase prices of NCD medicines included in the program at health facilities and households in Kenya.

\textit{Novartis Access} is currently selling its medicine baskets exclusively to the Mission for Essential Drugs and Supplies, or MEDS, the main supplier of medical facilities associated with faith-based organizations and also a key supplier for public facilities in several counties in the country. Thirty of Kenya’s counties have signed up with MEDS to purchase medicines and are thus eligible to receive the \textit{Novartis Access} portfolio. Of these counties, researchers will study the program’s effects at approximately 384 health facilities in eight counties (this is the level at which medicine purchasing is done). Four counties have been randomly assigned to a group that receives \textit{Novartis Access} medications through MEDS, while the other four comprise a comparison group that does not receive \textit{Novartis Access} during the two-year study period.

Researchers will assess \textit{Novartis Access}'s effects on prices and availability at the household level, with a total of 800 NCD patient households randomly selected from the eight study counties. To be eligible, a household must contain at least one member who has been diagnosed with and prescribed medication for one of the four NCD conditions targeted by \textit{Novartis Access} in Kenya. Of those households, 400 are from counties receiving \textit{Novartis Access}, and 400 are from counties in the comparison group.

Researchers are collecting data at both the health facility and household level through a three-phase survey focused on medicine prices and availability. Short monthly phone interviews are also being conducted with health facilities to collect basic information on medicine stock and price. Half of all households are also receiving phone interviews to collect information on the availability and price of the prescribed medicines for the diseases of interest; the other half of study households are not receiving the interviews so that researchers can detect any effects of the phone interviews themselves. Study health facilities and households were enrolled at the time of baseline data collection in 2016.
midline and endline survey are planned for 2018 and 2019, respectively.

**Results and Policy Lessons**
Project ongoing; results forthcoming.

**Sources**


4. Atun et al.
