

The Impact of Biopharmaceutical Innovation on Disability, Social Security Reciprocity, and Use of Medical Care of U.S. Community Residents, 1998-2015

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Key Findings and Policy Implications

This study analyzes the overall impact of biopharmaceutical innovations in reducing disability, Social Security reciprocity, and use of medical services, as new drug classes are approved and diffused through the health care system. Most of the data come from the Medical Expenditure Panel Survey. The paper finds that:

- The probability of disability, Social Security reciprocity, and medical care utilization is inversely related to the number of drug classes previously approved. Due to the gradual diffusion of new drug classes through the health care system, the length of the lag between FDA approval and the full health impact of the innovation is 6 to 9 years.
- Previous biomedical innovations reduced the number of people completely unable to work, do housework, or go to school in 2015 by 4.5 percent. They reduced the number of people with cognitive limitations by 3.2 percent., home health visits by 9.2 percent, inpatient events by 5.7 percent, missed school days by 5.1 percent, and outpatient events by 4.1 percent.
- Previous innovations also reduced the number of people receiving SSI in 2015 by 247,000, or 3.1 percent, and the number of people receiving Social Security benefits by 984,000, or 2.0 percent.
- The estimated value of these impacts in 2015 are \$27 billion in increased work, \$16 billion in Social Security and SSI savings, and \$71 billion in savings on emergency room visits, inpatient events, home health care visits, and outpatient events.

Numerous past studies have shown that the use of certain drugs can reduce disability. This study analyzes the overall impact of pharmaceutical innovation, based on the new drug classes approved for over 200 medical conditions.

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