USC Schaeffer

Leonard D. Schaeffer Center for Health Policy & Economics

# Return on Investment for Behavioral Healthcare:

## *Making the Case*

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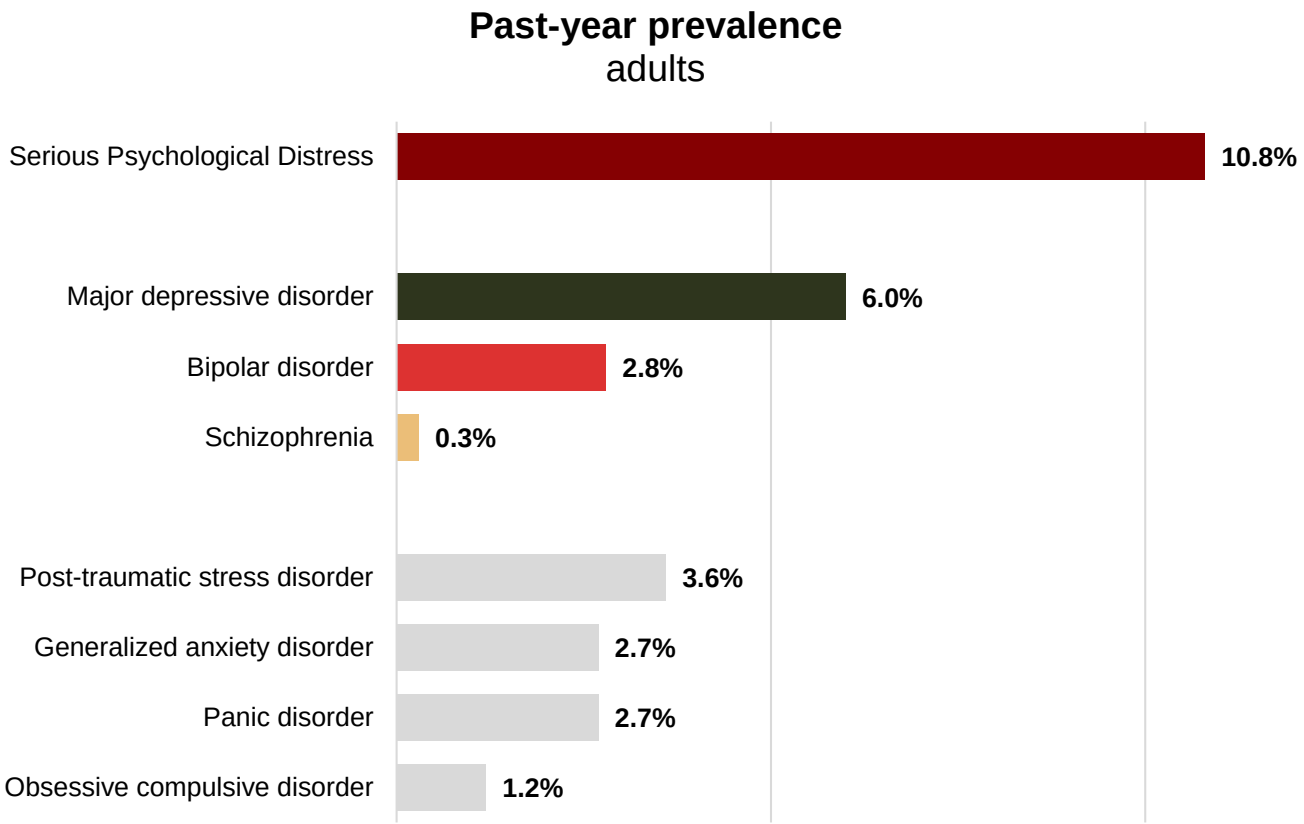
*April 22, 2018*

# Mental illness is highly prevalent in the U.S.

## UNITED STATES 2016



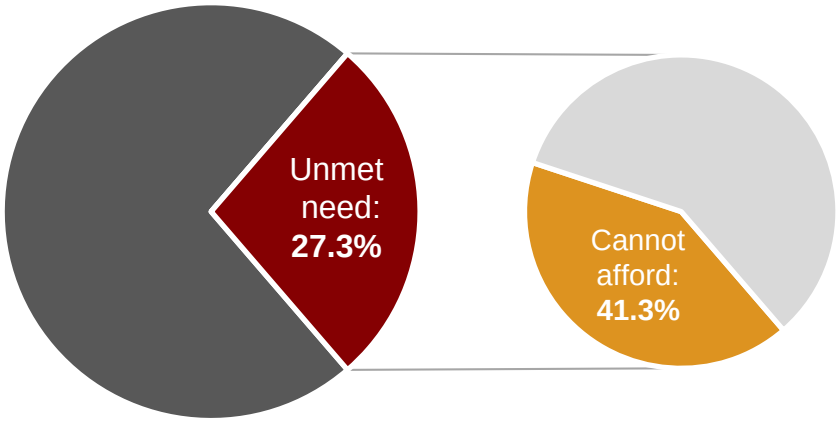

*NB: Due to symptom overlap, diagnoses of mental illnesses are not mutually exclusive*

*Source: National Survey on Drug Use and Health (NSDUH) 2016 (SPD), NSDUH Mental Health Surveillance Study 2008-2012 (major depressive disorder) and National Institutes of Mental Health (other conditions – see appendix for original sources)*

# But there is significant unmet need for mental health care in the U.S.

## UNITED STATES 2016

Among adults who experienced **serious psychological distress** during the past year:




27.3% indicates an **unmet need of mental health treatment**

And 41.3% of these people did not receive mental health treatment, **because they could not afford it**

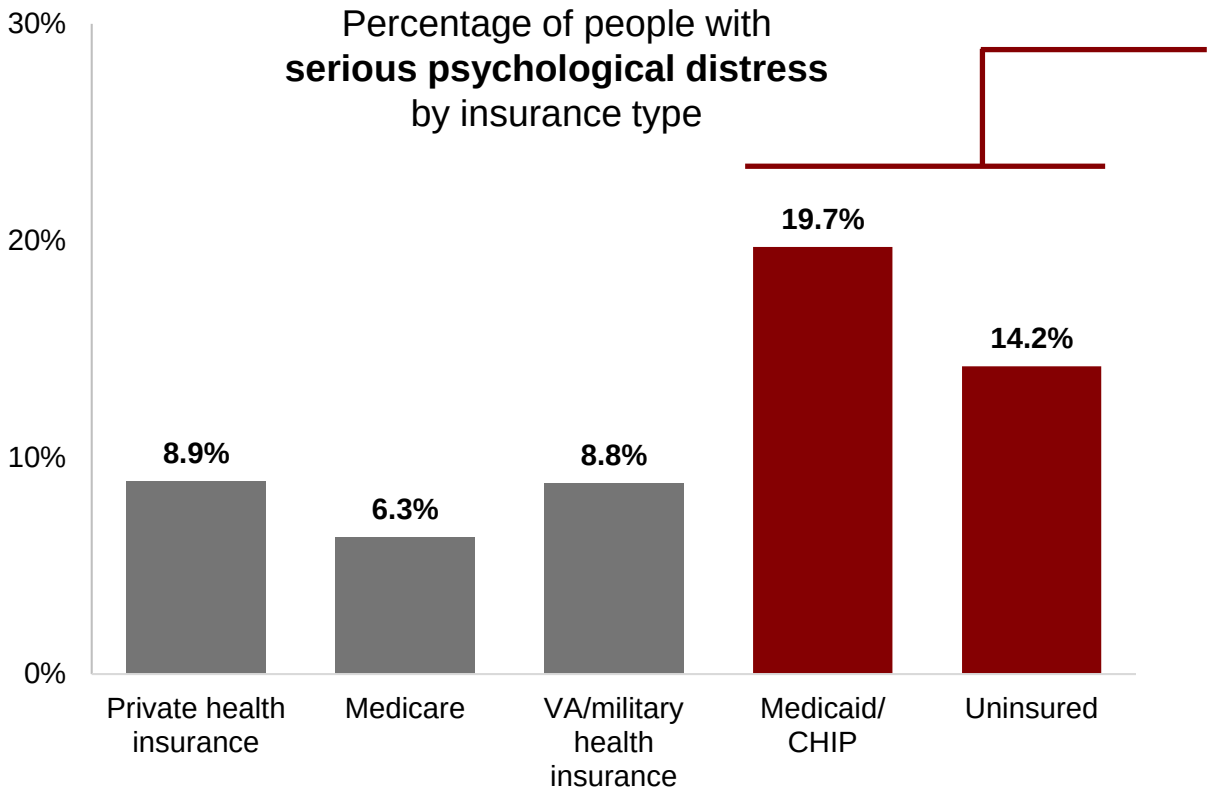
*More than a quarter of adults who experienced serious psychological distress in the previous year in the U.S. reported an unmet need for mental health care.*

*Almost half of the people with a perceived unmet need reported that they did not receive treatment because they could not afford it.*

*Source: National Survey on Drug Use and Health (NSDUH) 2016*

# People with mental illness have greater reliance on the safety net

## UNITED STATES 2016

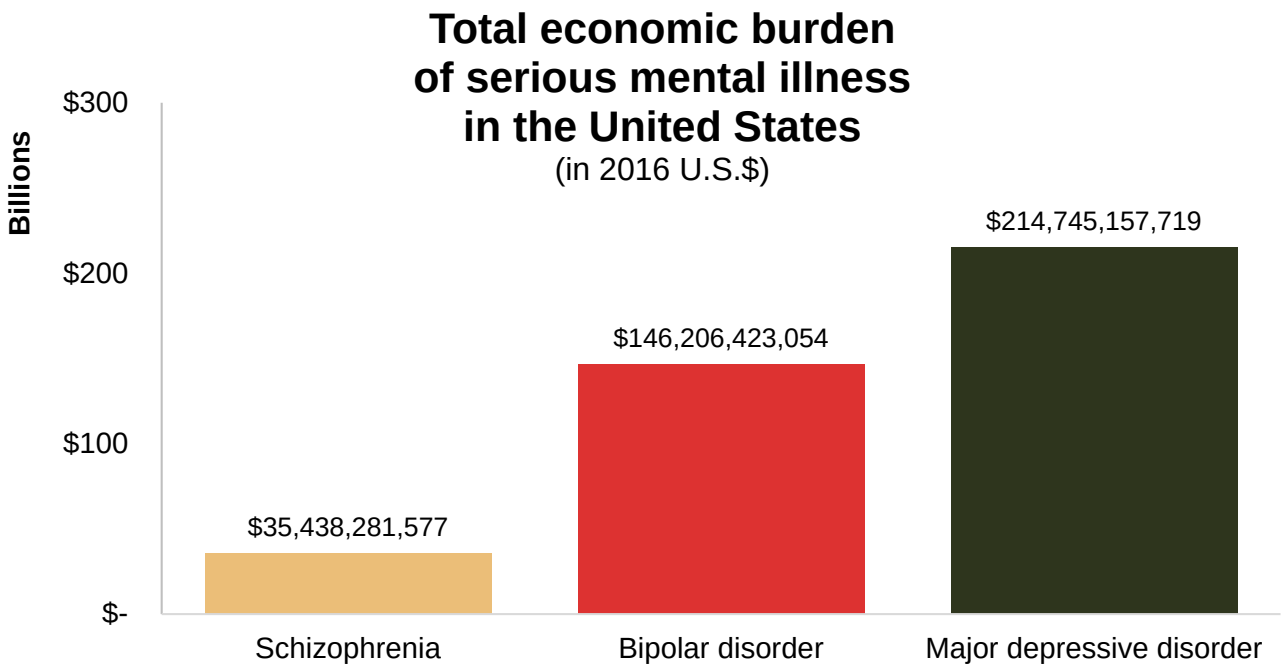



*In the **Medicaid and uninsured population**, a higher percentage of people reported serious psychological distress (SPD) during the past year compared to people with Medicare, VA/military, or private health insurance coverage.*

*Source: National Survey on Drug Use and Health (NSDUH) 2016*

# Economic burden of serious mental illness

## UNITED STATES 2016

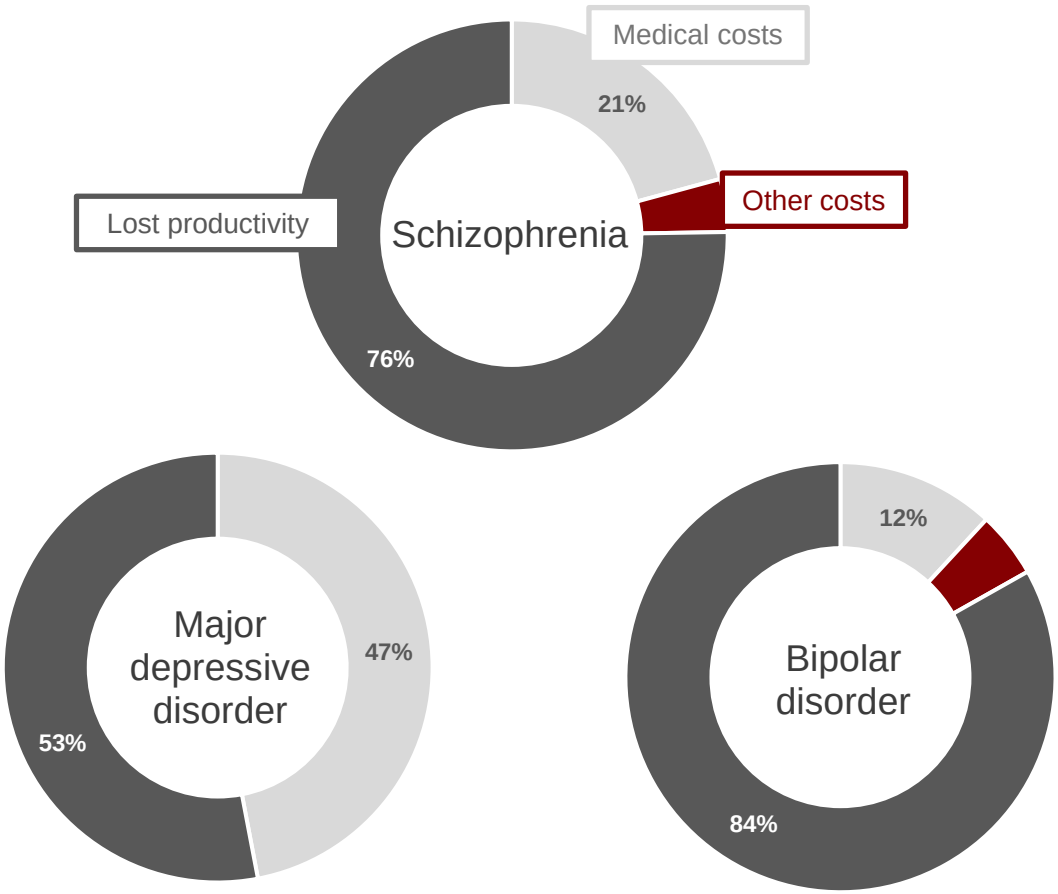



Note: Due to symptom overlap, diagnoses of mental illnesses are not mutually exclusive, therefore, patients with two or more diagnoses may be represented in multiple categories.

*Source: MacEwan JP, Seabury S, et al. Pharmaceutical innovation in the treatment of schizophrenia and mental disorders compared with other diseases. Innov Clin Neurosci. 2016 Aug 1;13(7-8):17-25. See appendix for original sources*

# Lost productivity is the largest contributor to economic burden of serious mental illness

## UNITED STATES




*Most of the total economic burden of serious mental illness is due to **lost productivity** (unemployment, lost compensation (incl. caregivers), or early mortality). Only 12 to 47% of the total burden is resulting from direct **medical costs**.*

*This highlights the large potential economic and societal benefits from improving treatment for serious mental illness even if it means spending more on care.*

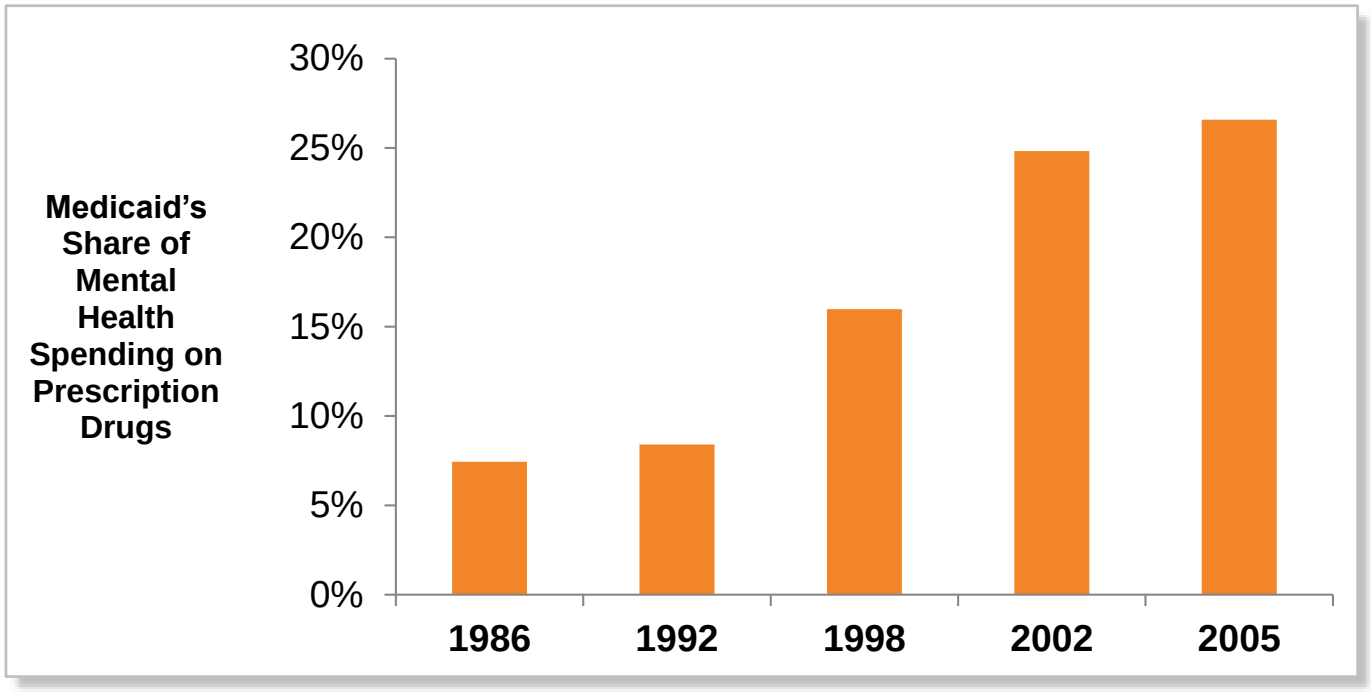
*Source: MacEwan JP, Seabury S, et al. Pharmaceutical innovation in the treatment of schizophrenia and mental disorders compared with other diseases. Innov Clin Neurosci. 2016 Aug 1;13(7-8):17-25. See appendix for original sources*

# Why don't we do a better job providing behavioral health care in the U.S.?

- The potential benefits of improving outcomes for individuals with mental illness are large
  - Could alleviate hundreds of billions in economic burden
- But the benefits are diffuse
  - Spread across different healthcare payers
  - Indirect benefits accrue outside the healthcare system
  - Recognized over long time horizon

***Individual agents (or agencies) may fail to recognize the benefits of improving access to quality mental healthcare***

# Medicaid spending on prescription drugs for mental health increased rapidly from 1985-2005




Source: Authors calculations from data reported in Mark, Tami L., et al. "Changes in US spending on mental health and substance abuse treatment, 1986–2005, and implications for policy." *Health Affairs* 30.2 (2011): 284-292.

# The policy response was to try and lower drug prices

## Facing rising costs, Medicaid programs often turned to formulary restrictions

Policies aimed at lowering costs by directing patients away from brand drugs and towards generics

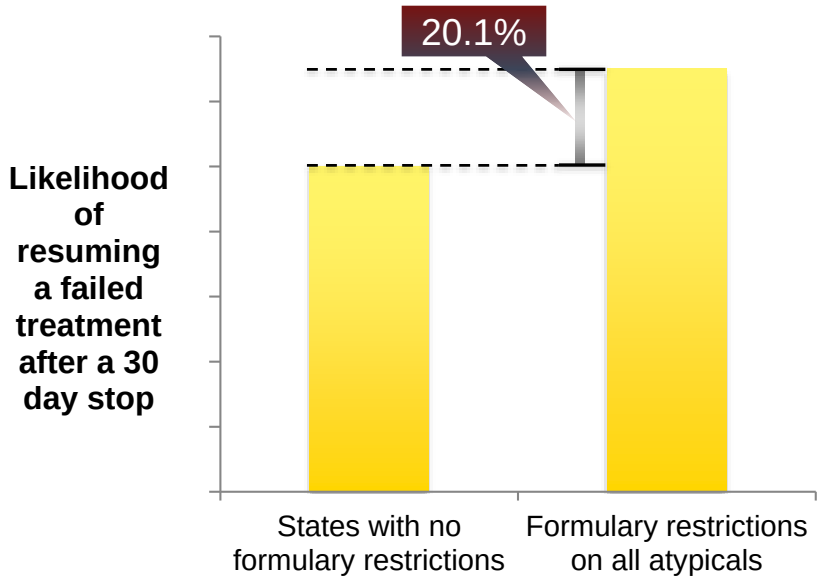
BRAND

GENERIC

***Was this the right policy response?***

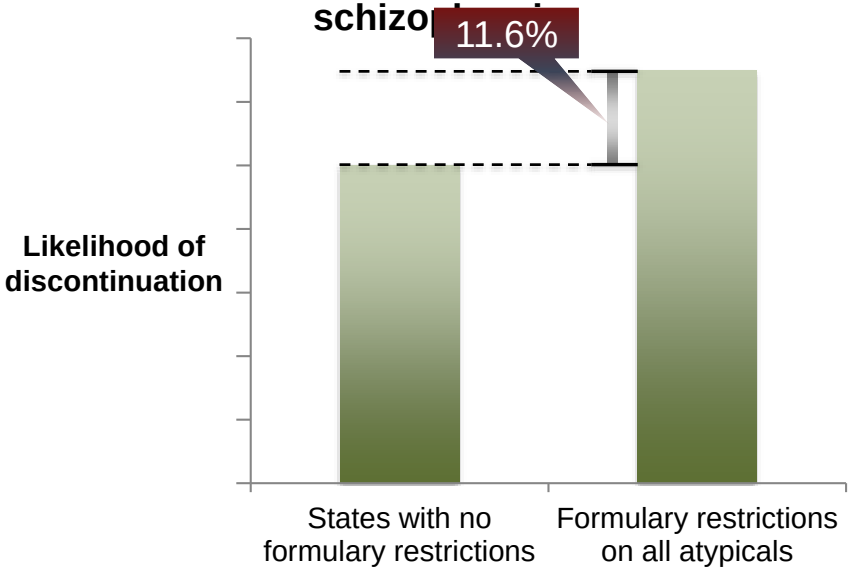
# But these policies worsened outcomes for some patients

## Replication of failure increases under formulary restrictions




In states where FR limit access to all atypicals, the likelihood of a patient resuming the same atypical after having ceased treatment for at least 30 days increases by **20.1%** relative to patients in states without restrictions.

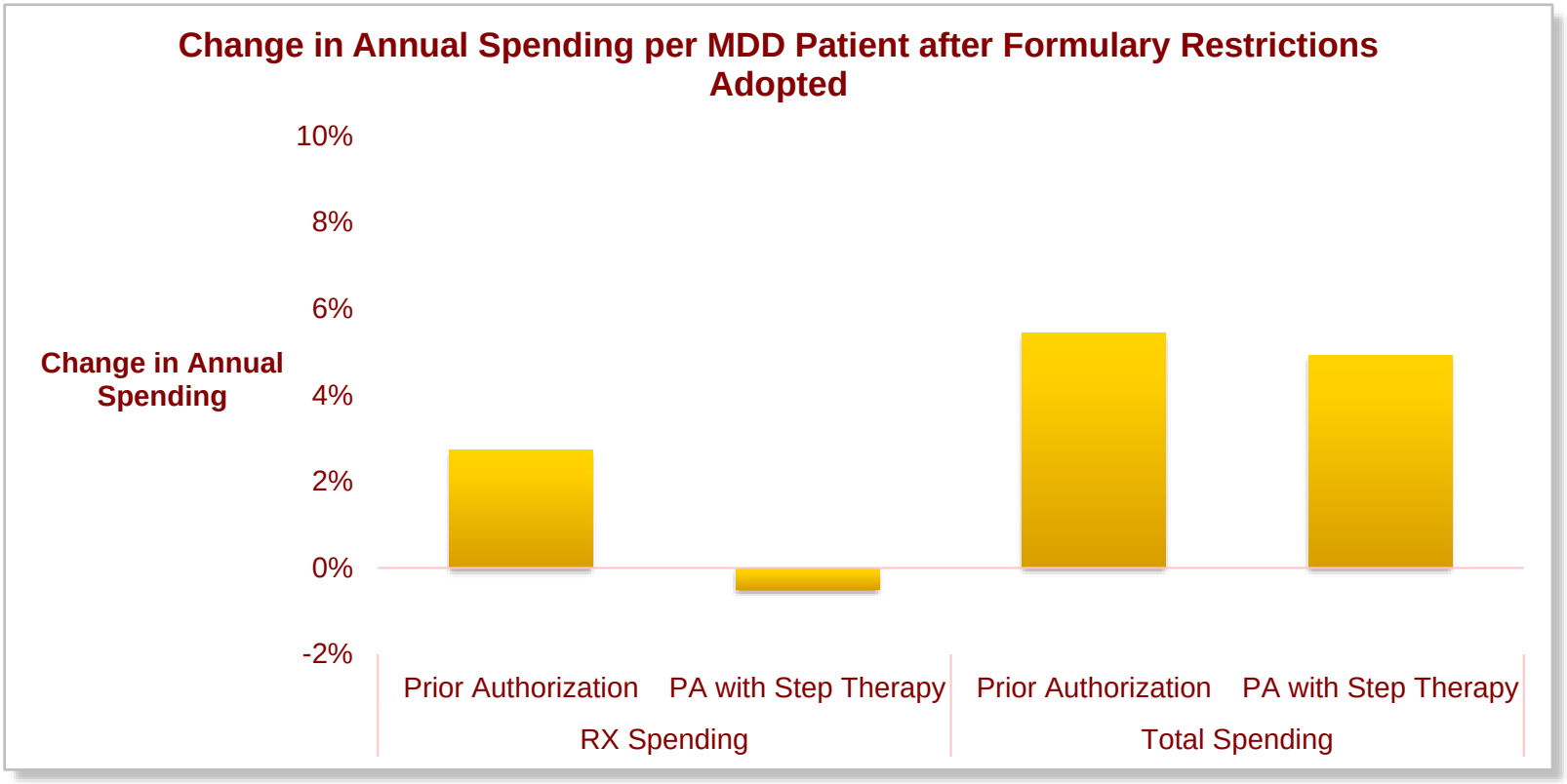
## Formulary restrictions facilitate higher discontinuation rates among patients with schizo




Additionally, patients in states that impose FR on all atypicals are **11.6%** more likely to discontinue all treatments.

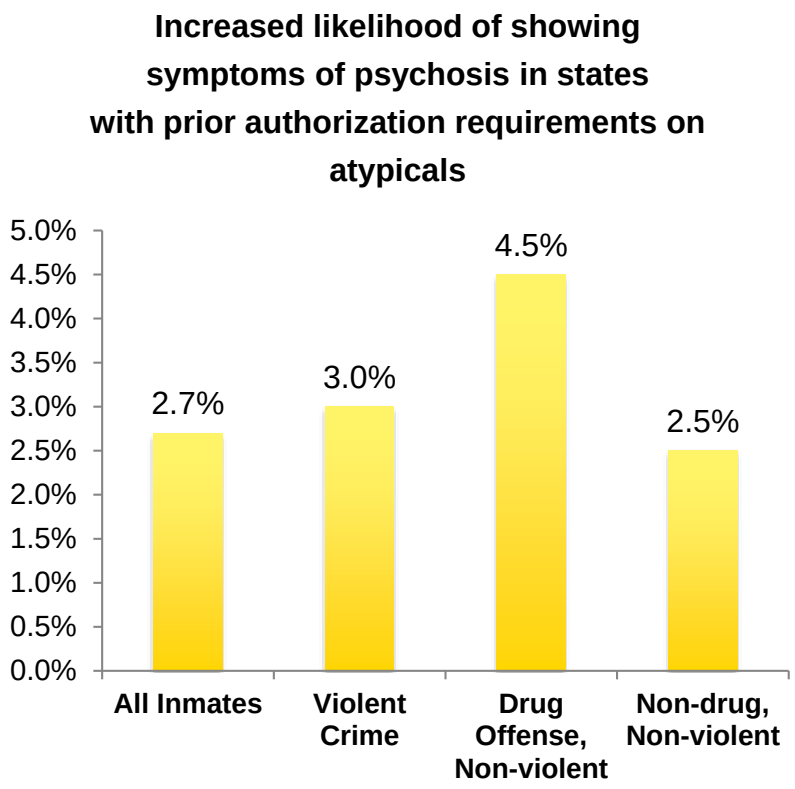
Source: Goldman, Dana P., Riad Dirani, John Fastenau, and Ryan M. Conrad. "Do strict formularies replicate failure for patients with schizophrenia?" *American Journal of Managed Care* 20, no. 3 (2014): 219-228.

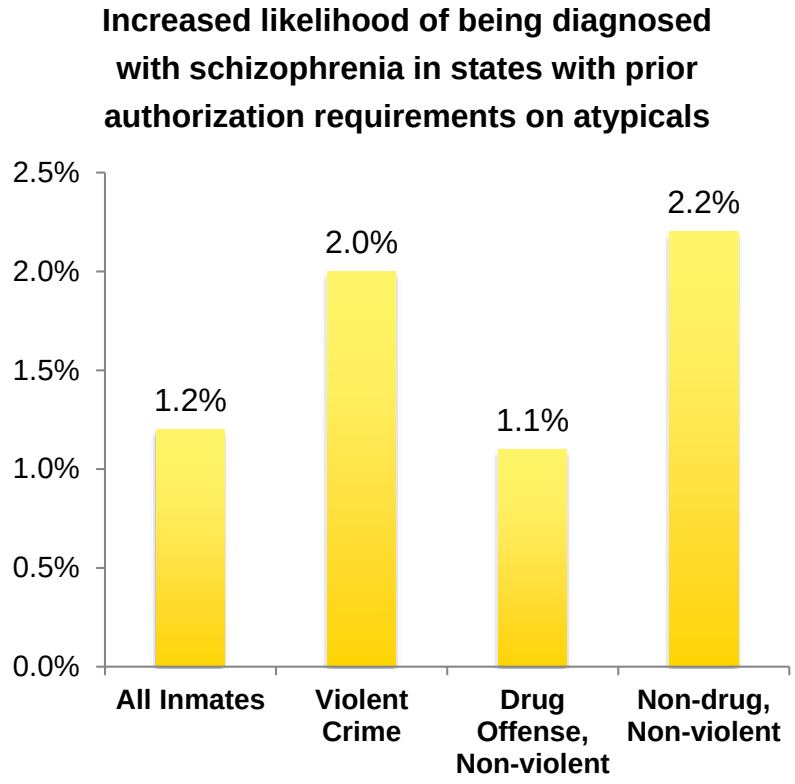
# This undercut the overall savings to Medicaid




Source: Author's calculations from "Seabury, SA., DN Lakdawalla, D Walter, J Hayes, T Gustafson, A Shrestha, and DP Goldman. "Patient Outcomes and Cost Effects of Medicaid Formulary Restrictions on Antidepressants." *Forum for Health Economics and Policy*, vol. 17, no. 2, pp. 153-168. 2014."

# And there may have been spillover costs to the criminal justice system




Source: Goldman D, Fastenau J, Dirani R, et al. "Do Medicaid Prior Authorization policies lead to increased imprisonment among schizophrenia patients?" *American Journal of Managed Care* (2013).

# A more comprehensive approach is needed to understand the true returns to behavioral healthcare

- **Need to look beyond line-item accounting of cost savings**
  - Consider *all types of medical spending*, including hospitalizations, outpatient services, medication, social services, etc.
  - Use *forward-looking measures* that consider the lifetime effects on patients
  - Measure both *direct and indirect effects*
    - Labor market productivity, correctional facility spending, caregiver burden, etc.
- More research and data are needed to support ROI measurement
  - Data that spans different systems
  - Research that includes objective measures of outcomes spanning the full range of potential costs and benefits

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References, data sources and methods are described in more detail in the online appendix.
This chartbook and the appendix can be downloaded at:
http://healthpolicy.usc.edu/Keck_Schaeffer_Initiative.aspx

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