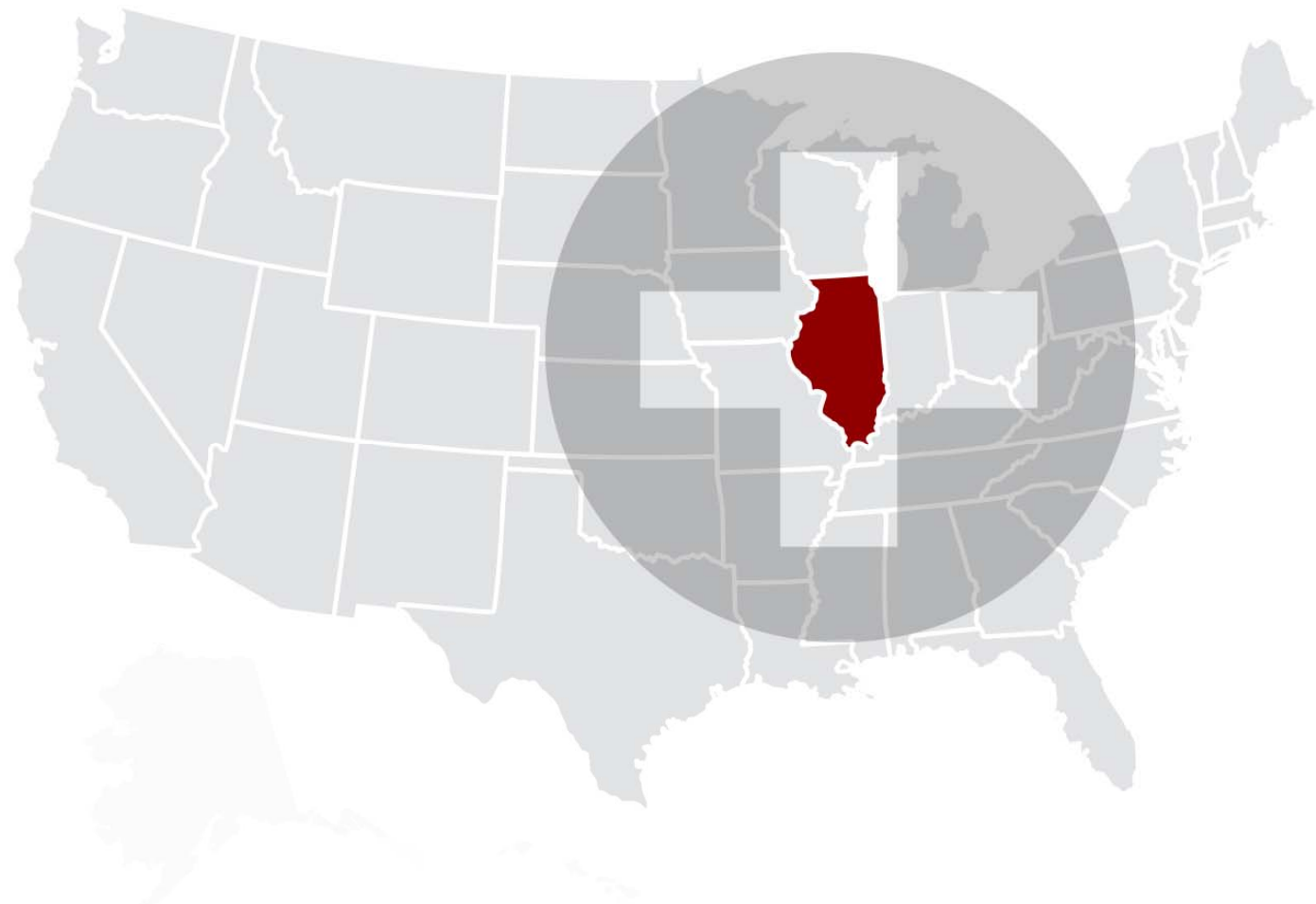


# **THE COST OF MENTAL ILLNESS: ILLINOIS FACTS AND FIGURES**

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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](http://healthpolicy.usc.edu/Keck_Schaeffer_Initiative.aspx)

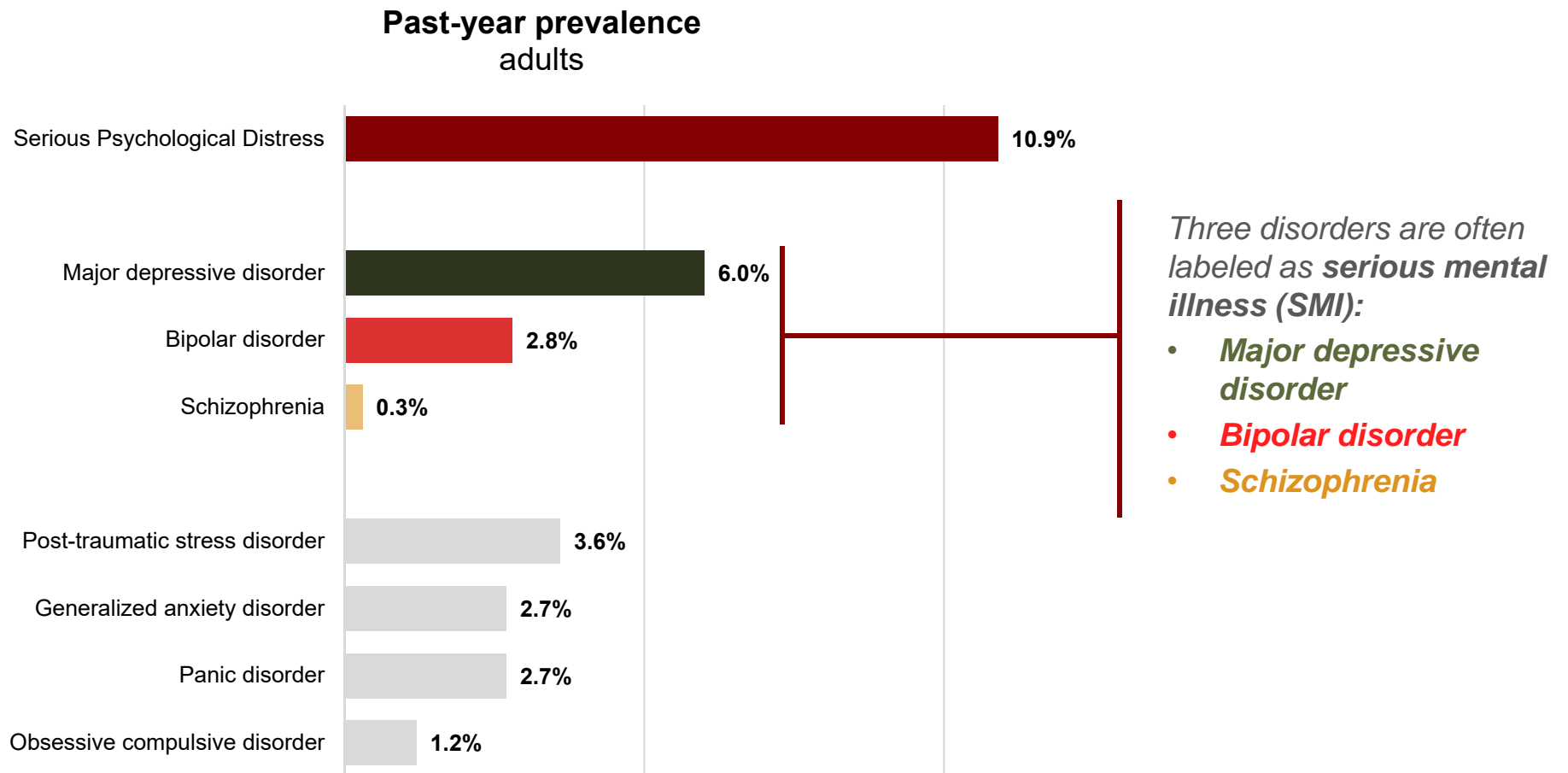
## INTRODUCTION

- Improving **access** to **high-quality behavioral health care** for patients with mental illness remains one of the most vexing problems facing the healthcare system in the United States.
- Our chartbook quantifies the magnitude of the challenges facing Illinois in terms of the economic burden associated with mental illness.
  - The size of the population with serious mental illness
  - Unmet health care needs
  - High rates of hospitalization
  - Workforce shortages
  - Implications for the Illinois criminal justice system

**QUANTIFYING THE  
POPULATION LIVING WITH  
SERIOUS MENTAL ILLNESS**

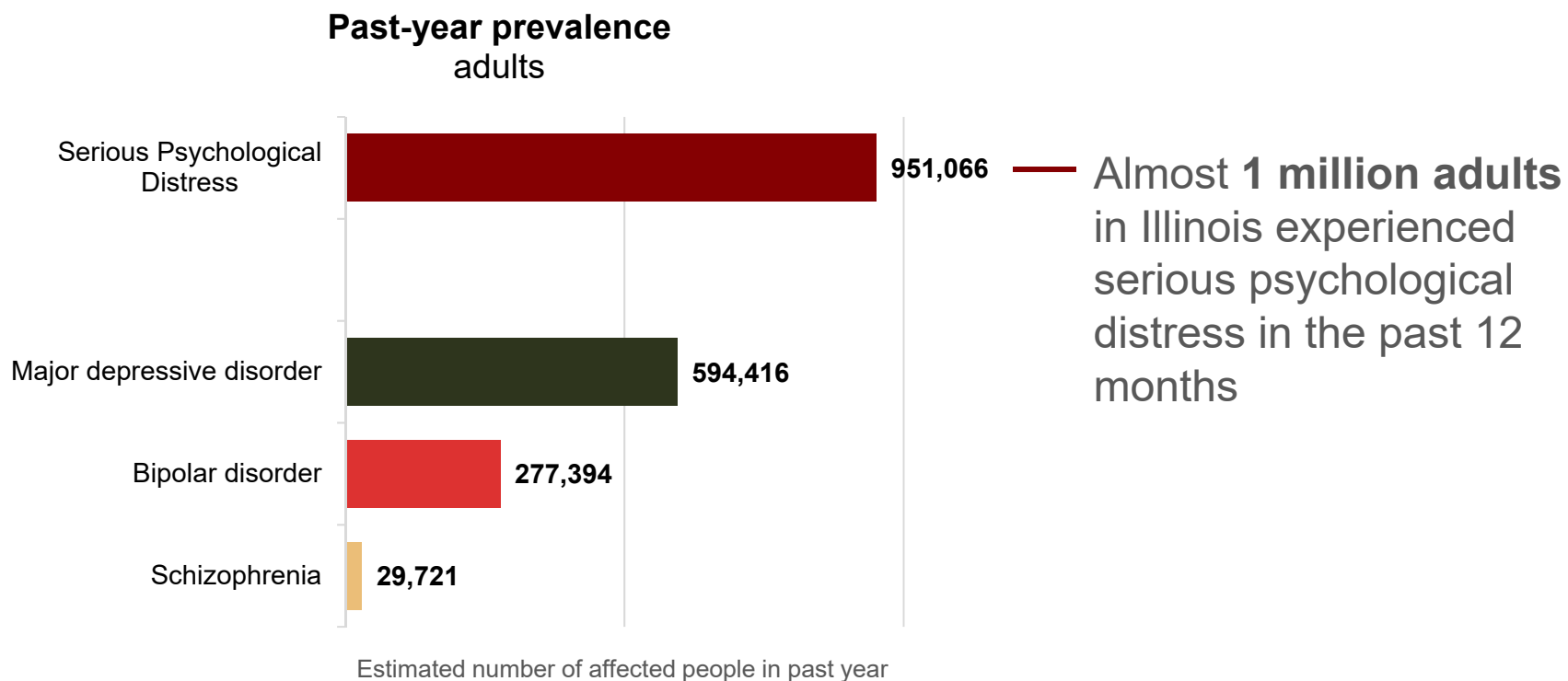
# Prevalence of mental illness

UNITED STATES 2017



# Estimated number of people living with mental illness in Illinois

ILLINOIS 2017

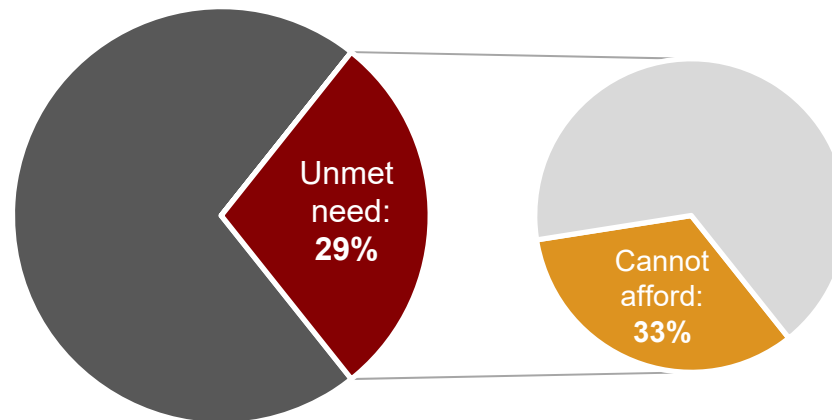


**UNMET  
MENTAL HEALTH CARE NEEDS**

# There is significant unmet need for mental health care in Illinois

ILLINOIS 2017

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



29% indicates an **unmet need of mental health treatment**

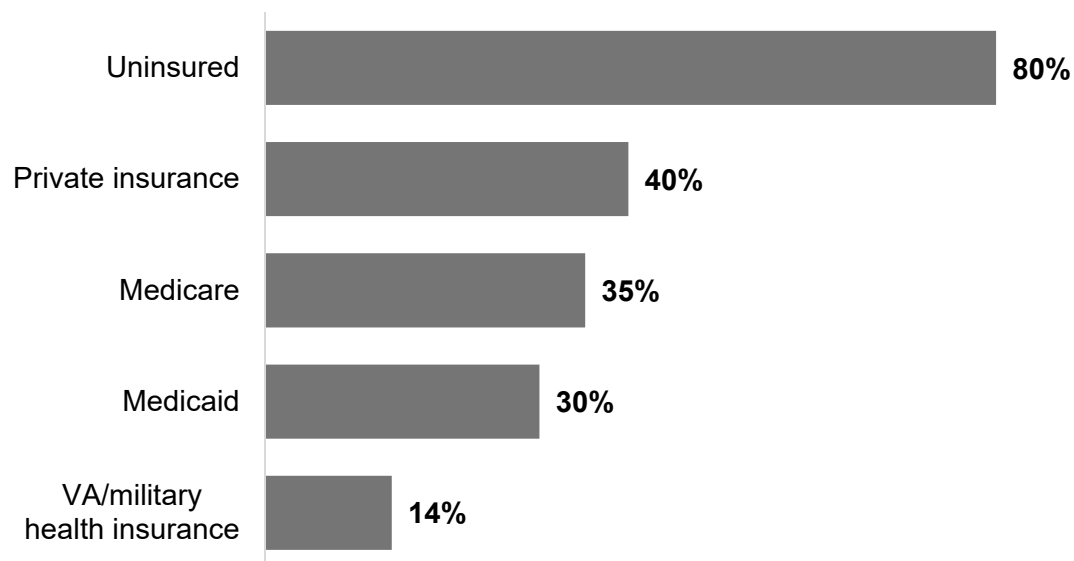
And 33% of these people did not receive mental health treatment, **because they could not afford it**



# Unmet need of mental health treatment due to costs differs by insurance coverage

UNITED STATES 2017

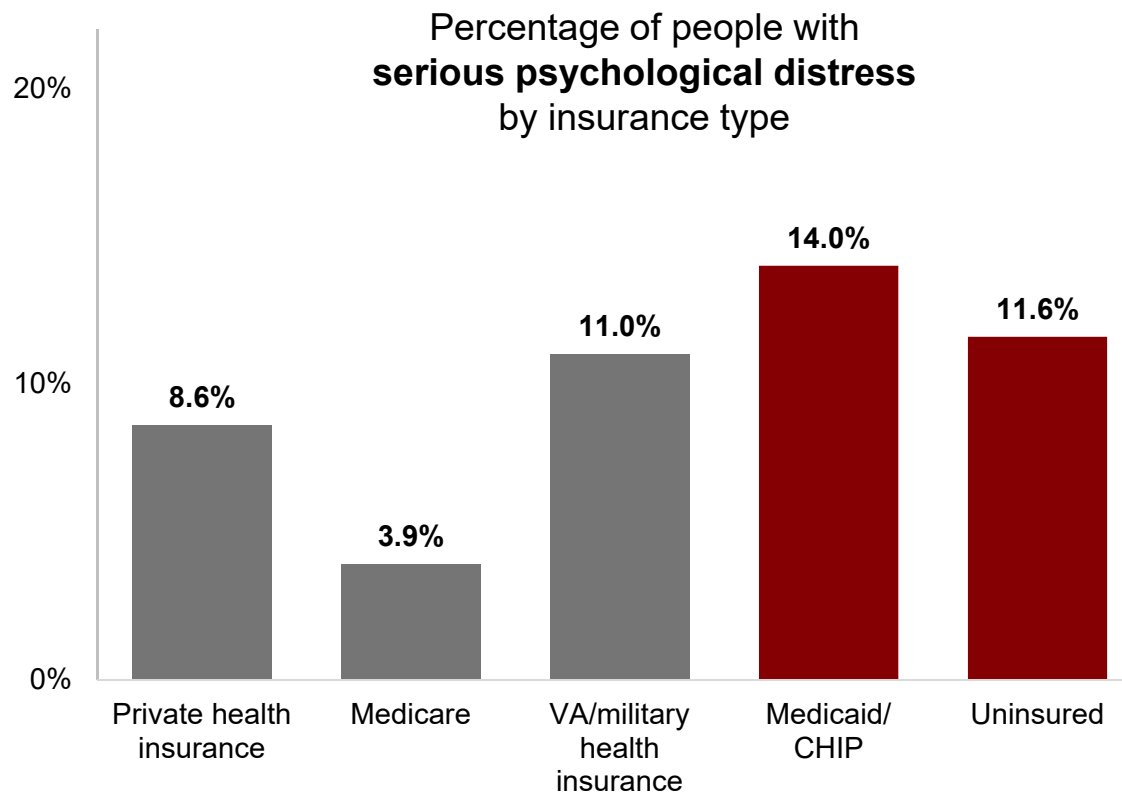
Percentage of adults  
**who could not afford mental health care**  
among those with past-year serious psychological distress  
and unmet need of treatment



Source: National Survey on Drug Use and Health (NSDUH, R-DAS) 2015-2016

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

ILLINOIS 2017



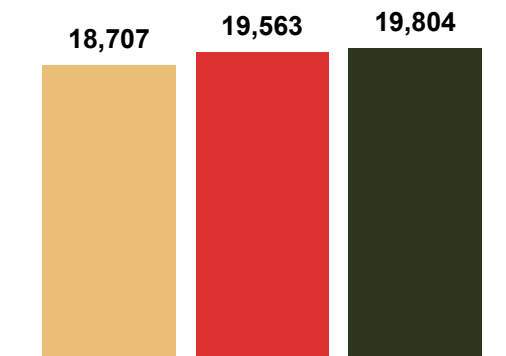
Source: National Survey on Drug Use and Health (NSDUH, R-DAS) 2016-2017

# **MENTAL HEALTH CARE UTILIZATION**

# Hospitalizations for mental illness

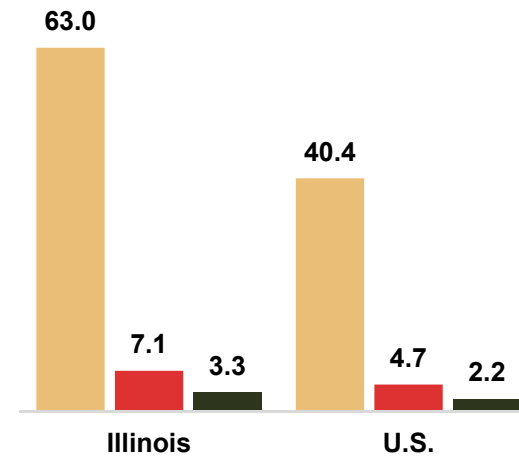
## ILLINOIS AND UNITED STATES 2014

**Hospitalizations**  
Illinois - adults



- Schizophrenia
- Bipolar Disorder
- Major Depressive Disorder

**Hospitalization rate**  
per 100 patients - adults



- Schizophrenia
- Bipolar Disorder
- Major Depressive Disorder

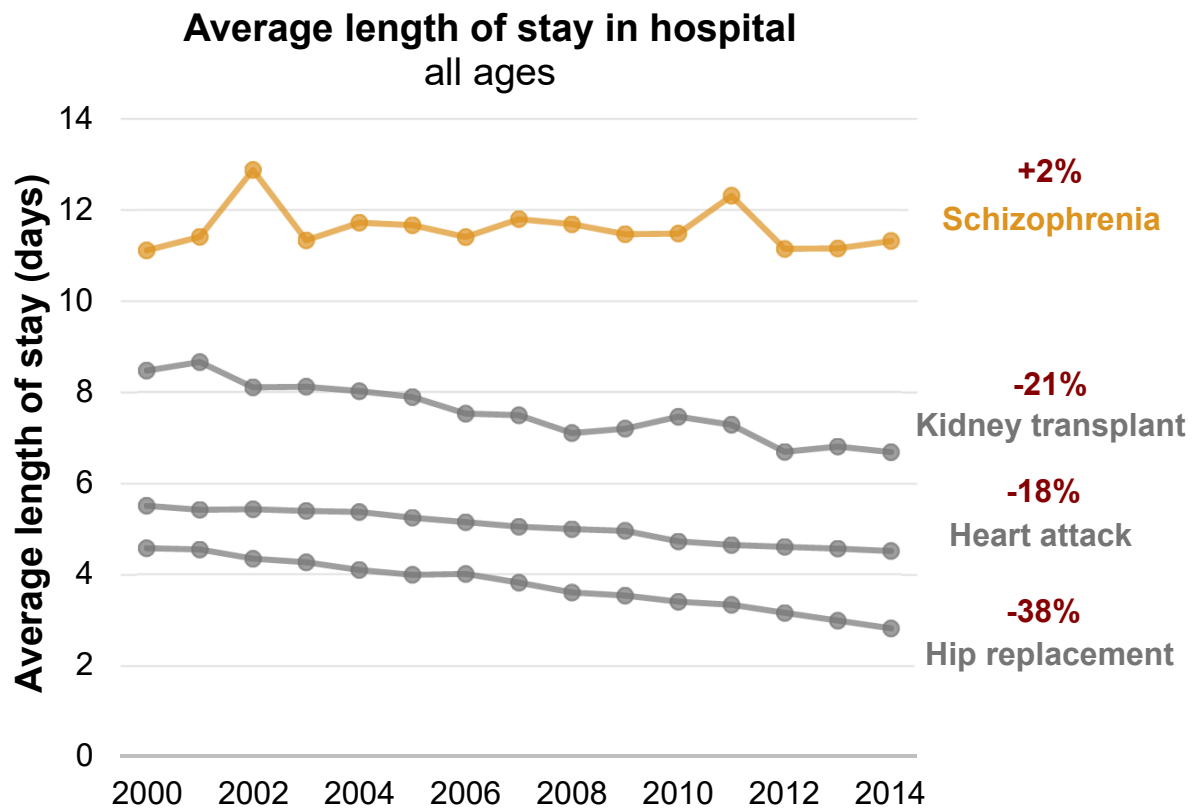
4.5 % of all hospitalizations are due to SMI

Source: Healthcare Cost and Utilization Project (HCUPnet) 2014

Estimate of hospitalization rate: based on total state population (Census bureau data, 2014) and prevalence estimates reported previously

# Trends in length of stay for schizophrenia hospitalizations

UNITED STATES 2000-2014



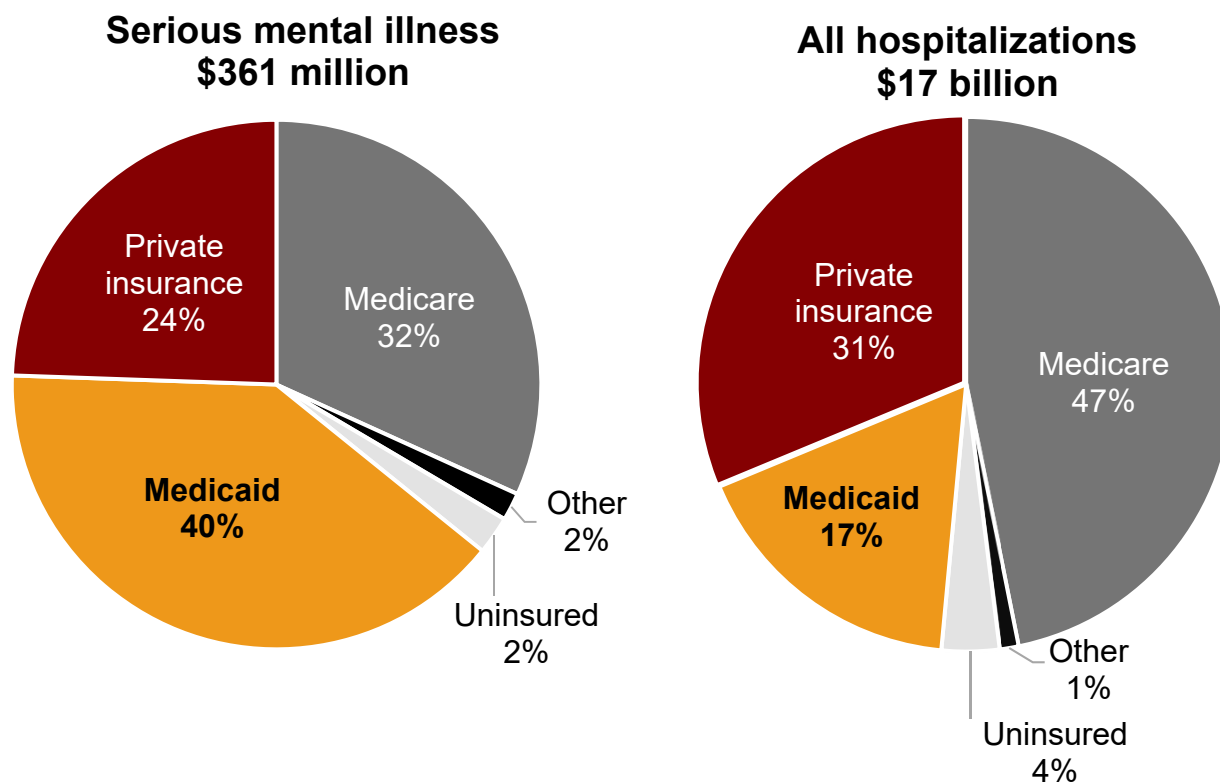
Source: Healthcare Cost and Utilization Project (HCUPnet) 2014

# **MENTAL HEALTH CARE COSTS & REIMBURSEMENTS**

# Total hospital costs for serious mental illness hospitalizations by insurance type

ILLINOIS 2014

Total hospital costs  
(all ages, in 2018 U.S. \$)



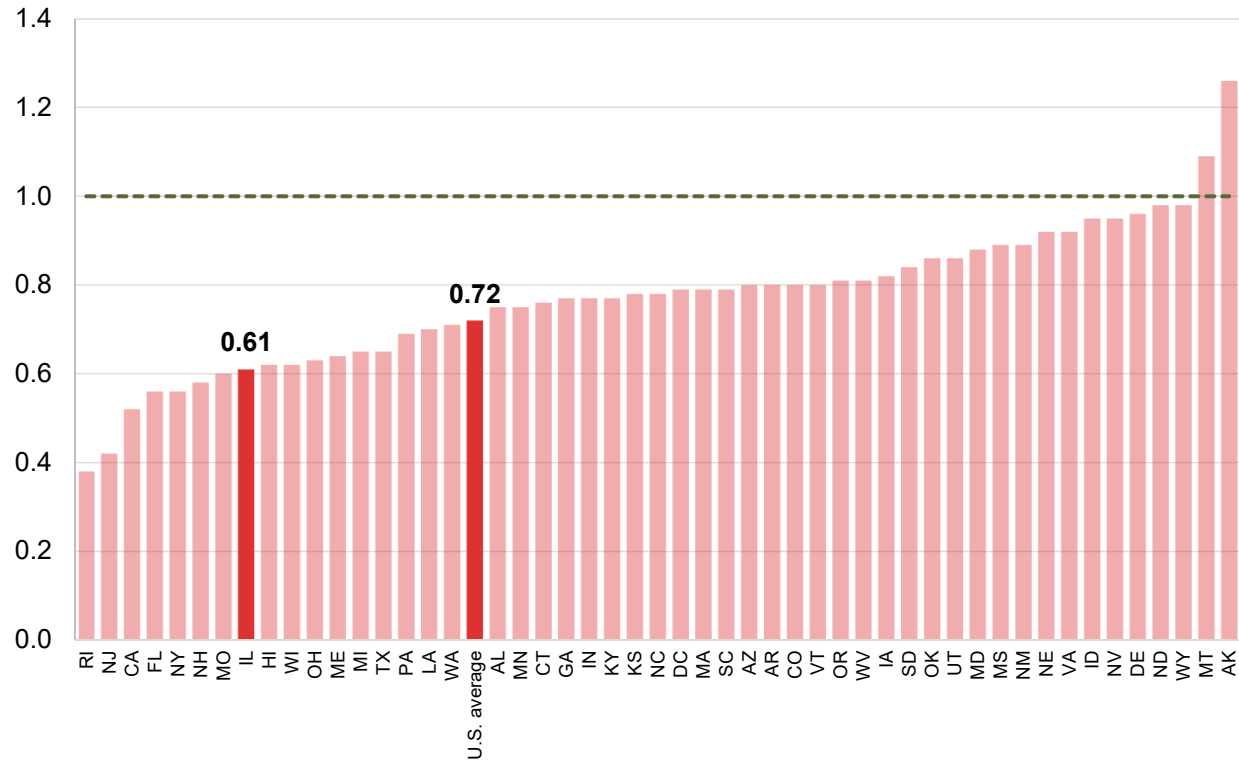
Source: Healthcare Cost and Utilization Project (HCUPnet) 2014.

'Other' includes Worker's Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs. 'Uninsured' includes 'self-pay' and 'no charge'.

# Medicaid reimbursement rates to physicians are low

## ILLINOIS AND UNITED STATES 2016

Medicaid-to-Medicare fee ratio, 2016



Source, Kaiser Family Foundation, Medicaid-to-Medicare Fee Index, FY 2016

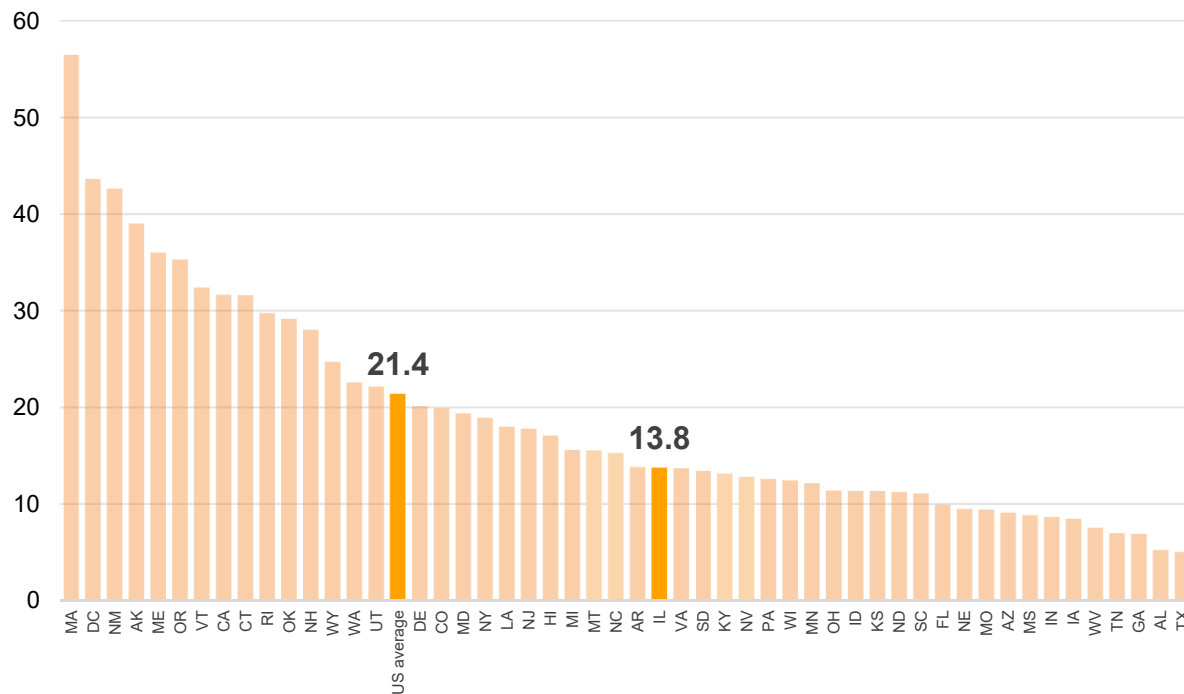


# **AVAILABILITY OF BEHAVIORAL HEALTH CARE PROFESSIONALS**

# Availability of behavioral health care professionals

## ILLINOIS AND UNITED STATES 2018

Number of behavioral health care professionals per 10,000 residents

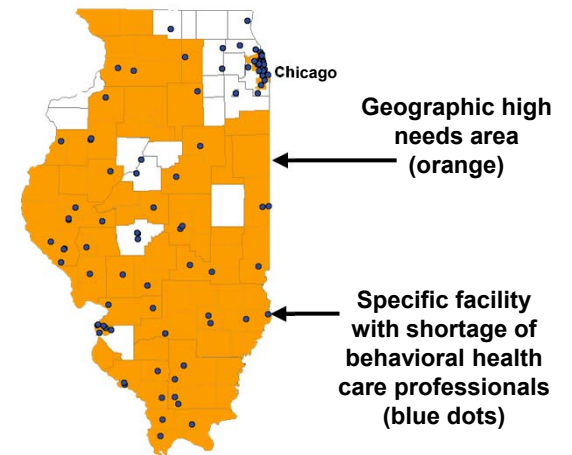
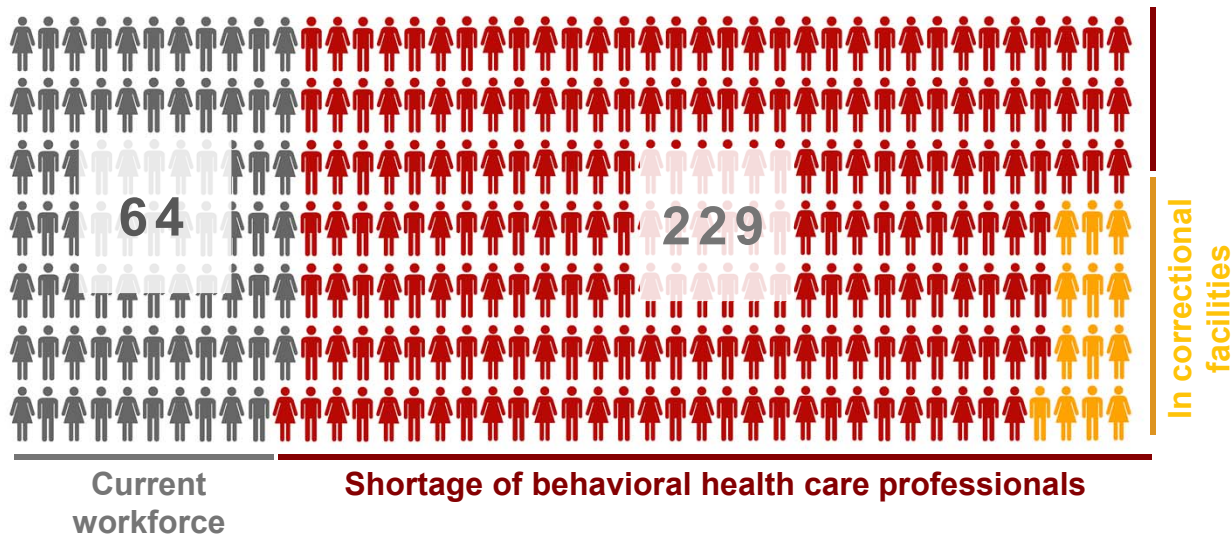


**Behavioral health care professionals include:** psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and advanced practice nurses specializing in behavioral health care.

Source: County Health Rankings & Roadmaps, by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

# Shortage of behavioral health care professionals

ILLINOIS 2019



**Behavioral health care professionals:**

psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage & family therapists

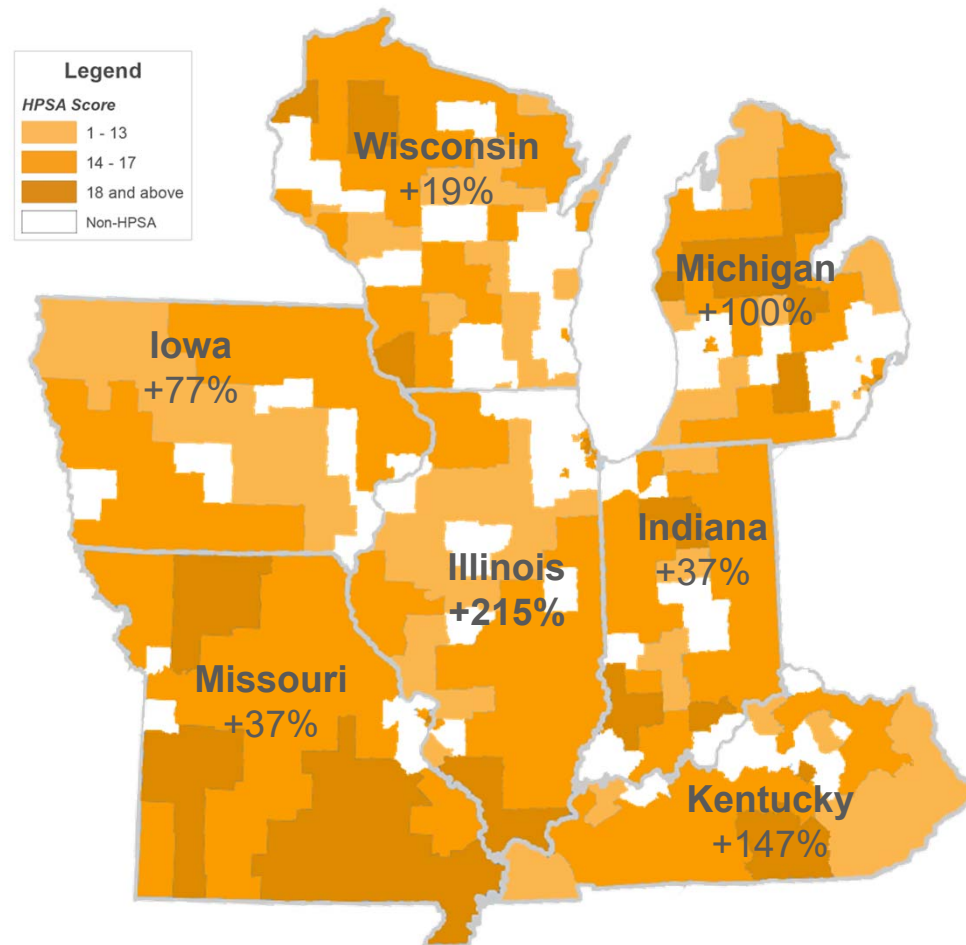
**Facilities:**

Federal & state correctional institutions, state & county mental hospitals, community mental health centers, and other public or nonprofit private facilities

**Geographic high needs area** based on population-to-provider ratio, poverty levels, elderly and youth ratio, alcohol and substance abuse prevalence, and travel time to nearest source of care outside area

# Increase in shortage of behavioral health care professionals in the Illinois region

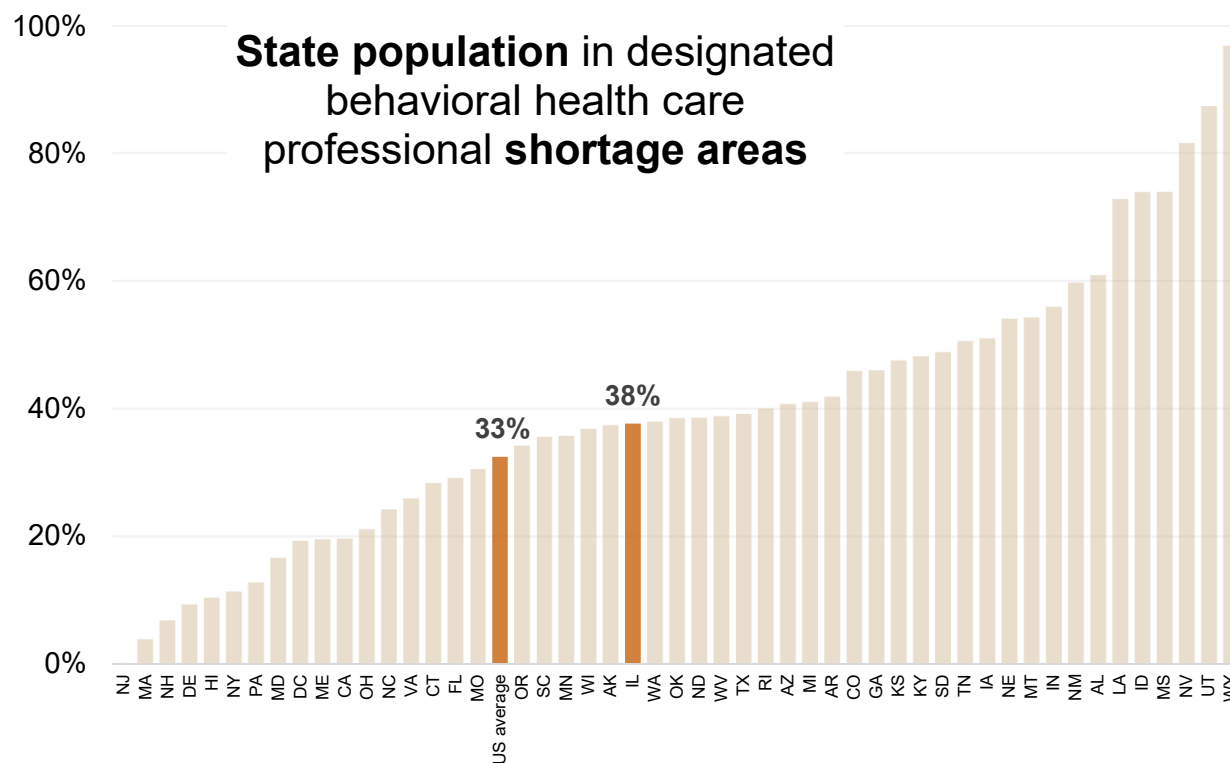
## ILLINOIS BETWEEN 2017 AND 2019



Source: Health Professional Shortage Areas (HPSA), HRSA Data Warehouse data as of 01/13/19

# State population in behavioral health care professional shortage areas

ILLINOIS AND UNITED STATES 2019



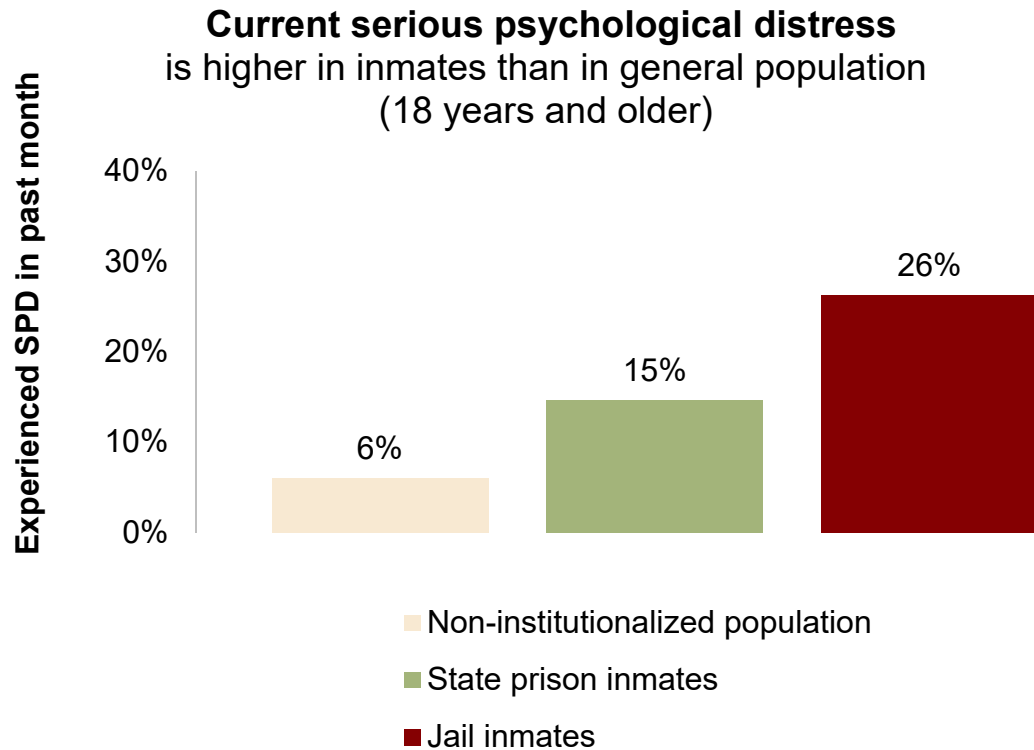
**4,827,306 people in Illinois** reside in designated shortage areas and/or are served by a facility with shortages of behavioral health care professionals

Source: Health Professional Shortage Areas (HPSA), HRSA Data Warehouse, 01/13/19, and Census Bureau data (2017)

# **MENTAL HEALTH CONDITIONS & THE CRIMINAL JUSTICE SYSTEM**

# Mental health issues in prison and jail populations

## UNITED STATES

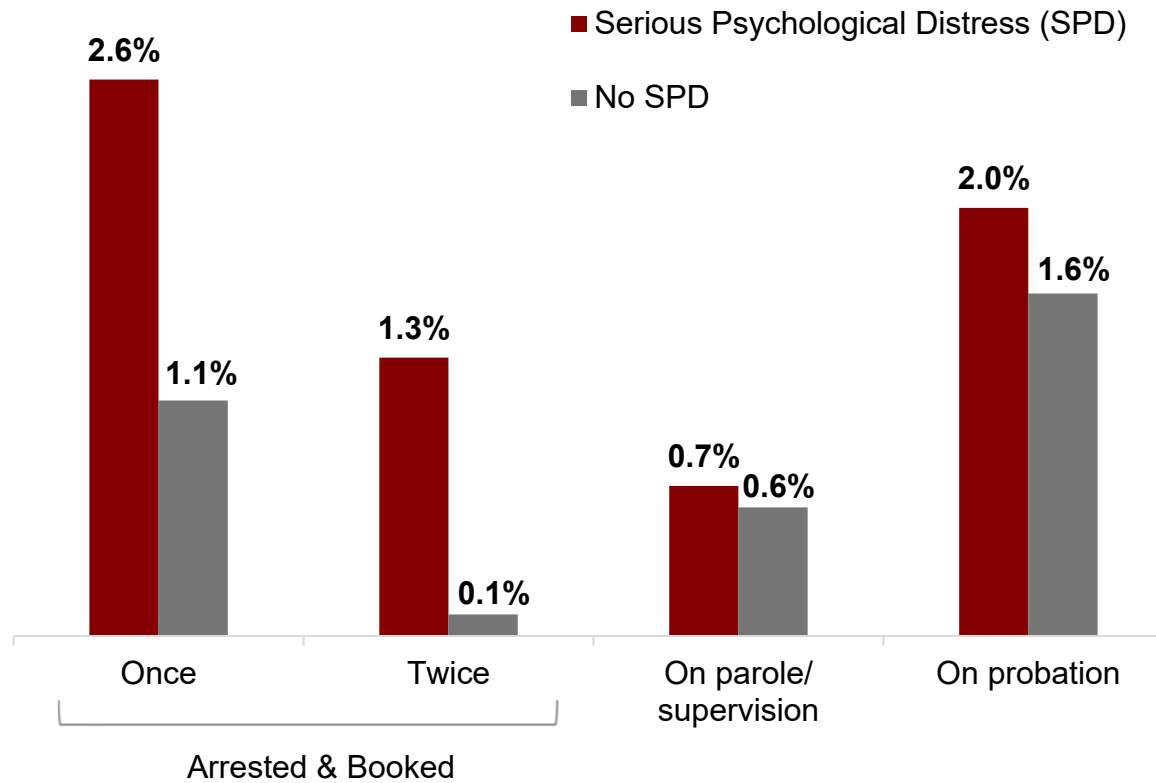


Source: National Survey of Drug Use and Health (NSDUH) 2016

Bureau of Justice report: Sexual Victimization in Prisons and Jails Reported by Inmates, 2011-12,  
based on data from the National Inmate Survey

# Contact with criminal justice system

ILLINOIS 2017



Source: National Survey on Drug Use and Health (NSDUH, R-DAS) 2016-2017  
Survey does not include current institutionalized population

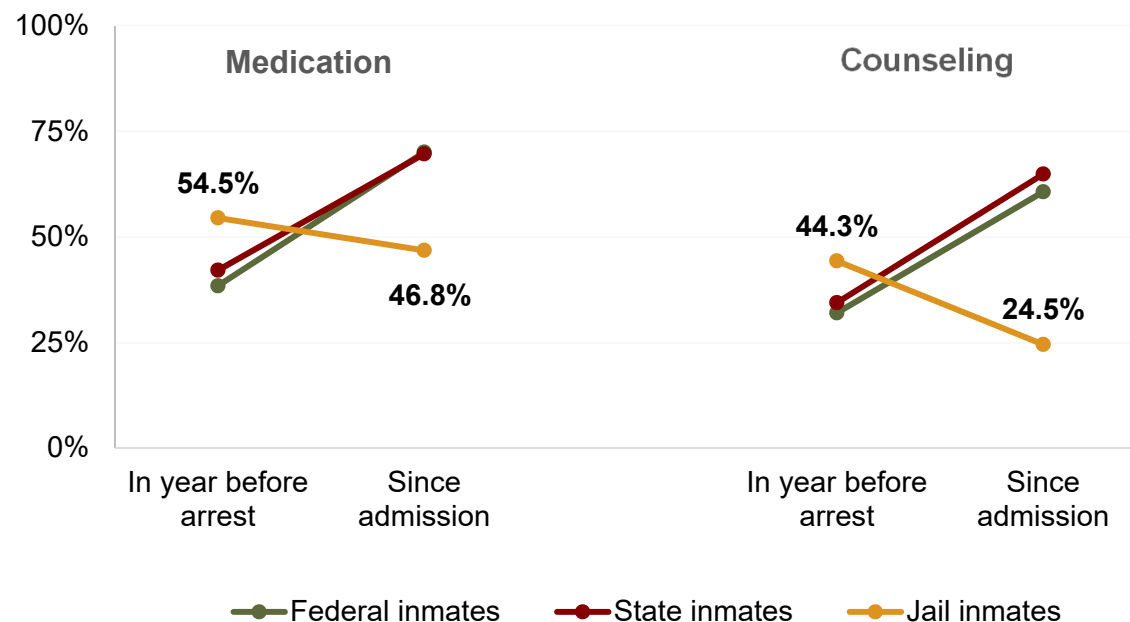


# Change in treatment before and during incarceration in prison and jails

UNITED STATES

## Lack of access to mental health treatment in local jails

Among inmates with a previously diagnosed serious mental illness and who have ever received respective treatment before incarceration



Source: SISFCF (Survey of inmates in states and federal correctional facilities) 2004 & SILJ (Survey of inmates in local jails) 2002

Estimated number of  
**Illinois state prison inmates** in 2017,  
previously diagnosed with serious mental illness:

**7,883**

Estimate of overall annual costs in 2017:

**\$253,894,069**

(in 2018 U.S.\$)

*Overall annual costs based on 2017 average of all state prison inmates in Illinois*

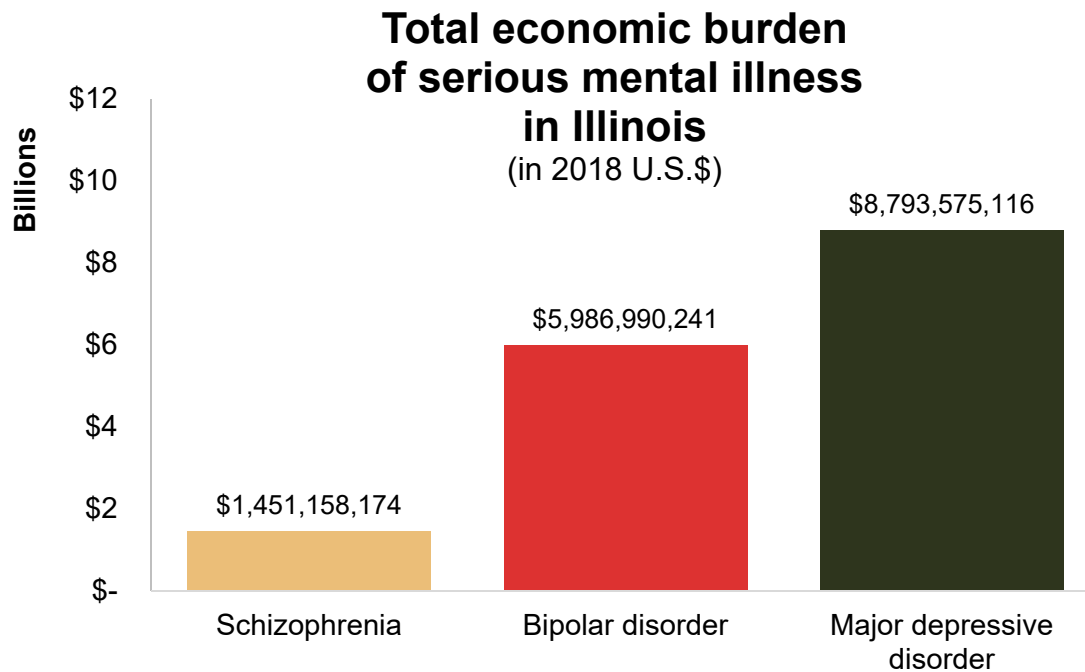
*Source: Annual Survey of State Government Finances 2017*

*Survey of Inmates in State/Federal Correctional facilities, BJS, 2004*

*Illinois Department of Corrections - Fiscal Year 2017 Annual Report*

# Economic burden of serious mental illness

ILLINOIS 2018



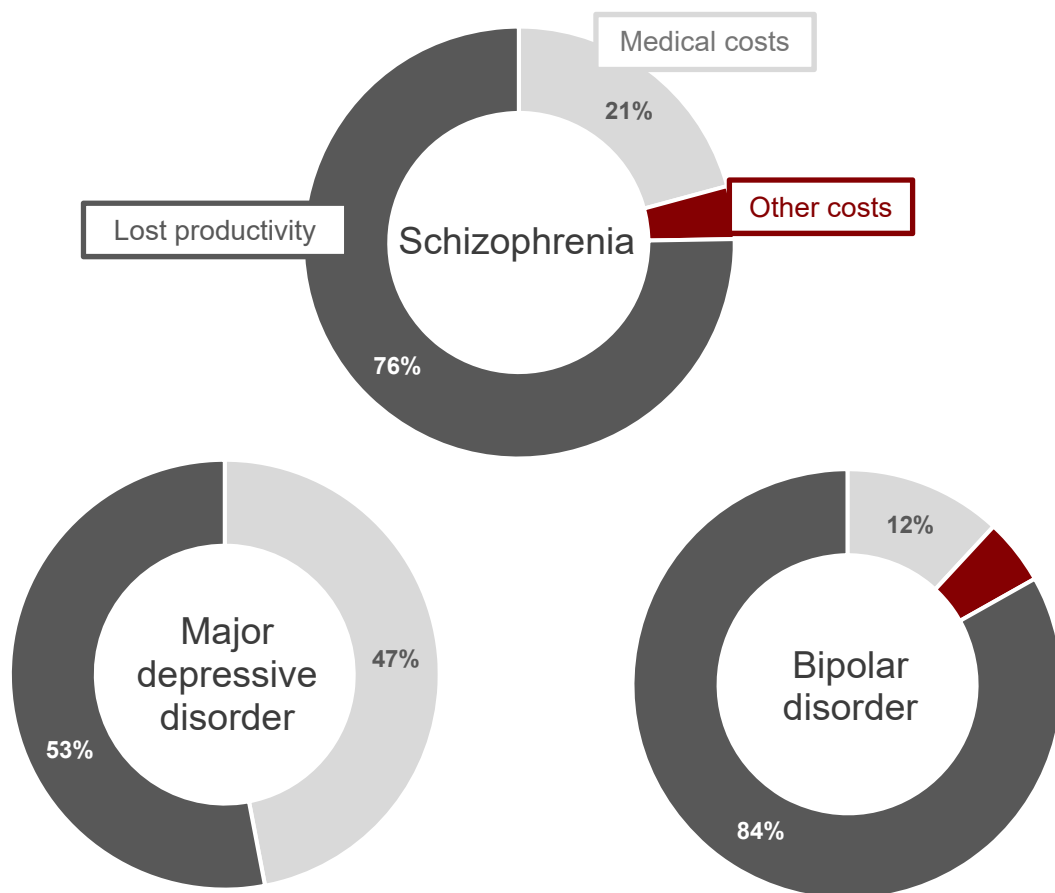
*The economic burden of schizophrenia, bipolar disorder, and major depressive disorder in adults in Illinois is estimated to be at least \$1.4 billion for each serious mental illness*

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



**Lost productivity:** unemployment, lost compensation (incl. caregivers), or early mortality.

**Medical costs:** also includes substance abuse treatment

**Other costs:** law enforcement, incarceration, shelters, and research & training.

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

# USC Schaeffer

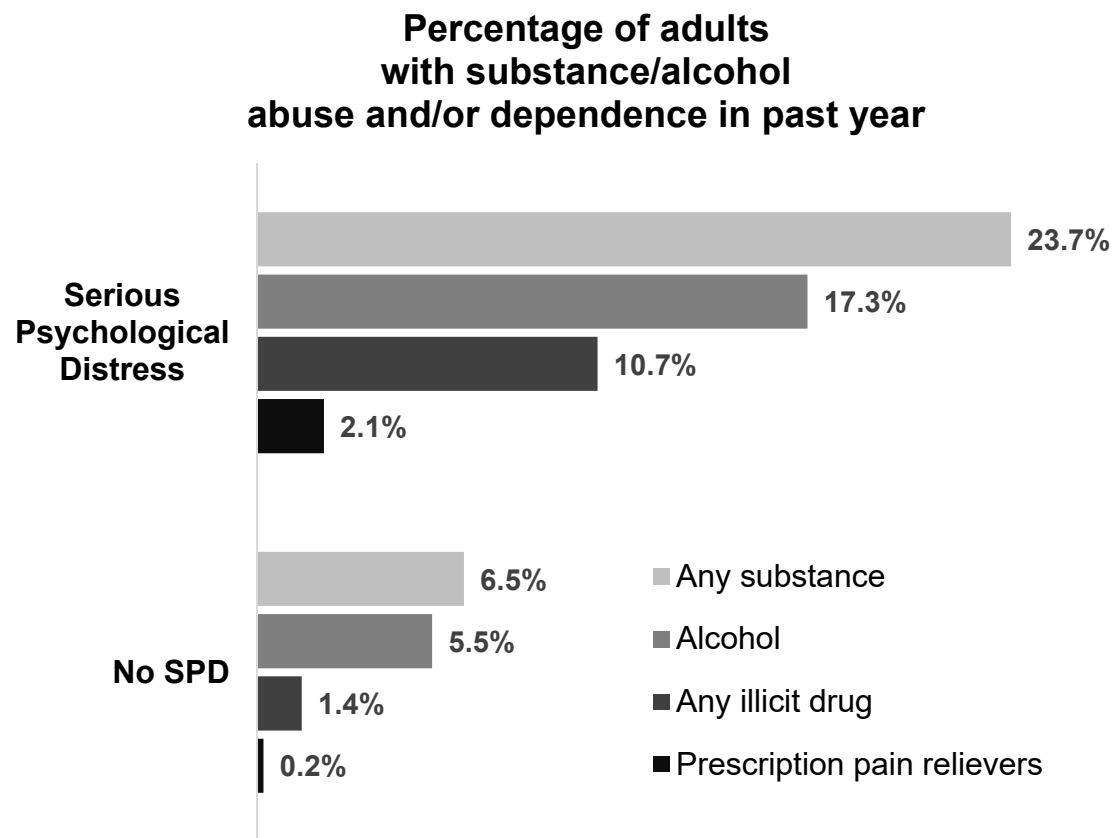
Leonard D. Schaeffer Center  
for Health Policy & Economics

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# Substance use disorders in people with serious psychological distress

ILLINOIS 2017



Source: National Survey on Drug Use and Health (NSDUH, R-DAS) 2016-2017