USC Schaeffer

Leonard D. Schaeffer Center
for Health Policy & Economics

ILLUSTRATING THE COST OF MENTAL ILLNESS:

WHICH FACTS? WHAT FIGURES?

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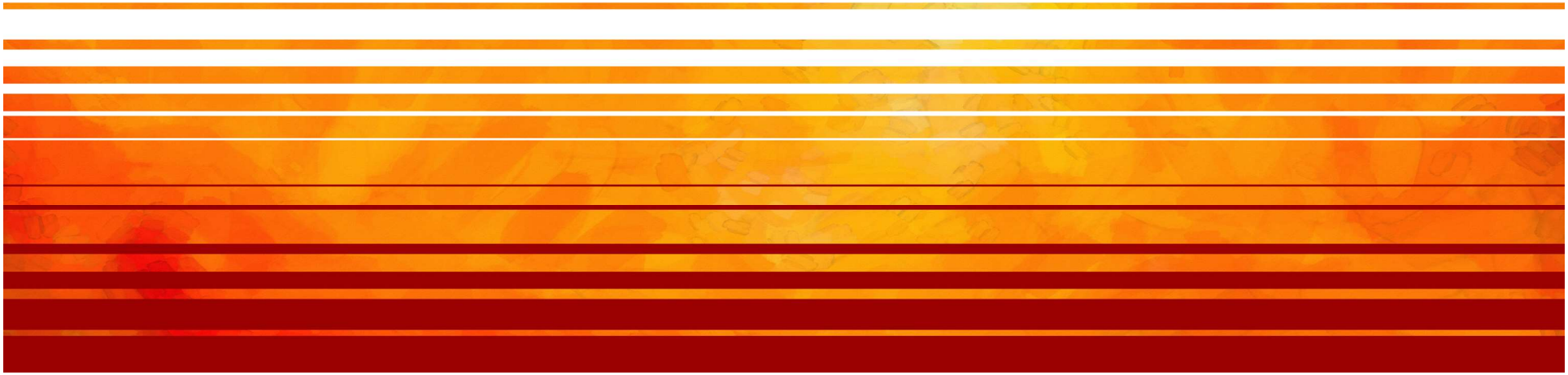

ACKNOWLEDGMENTS

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National Council for Behavioral Health and the Behavioral Health + Economics Network.

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

Who are We?

Keck Schaeffer Initiative for Population Health Policy

The KSI is a joint venture between the Leonard D. Schaeffer Center for Health Policy and Economics and the Keck School of Medicine of USC

Mission:

- "to combine empirical, multidisciplinary and policy-driven research with clinical insight to develop high value strategies to improve the health of vulnerable populations"

Specifically we are engaged in projects to:

- Improve behavioral health care in the US
- Expand access to high quality vision care
- Reduce the burden of disability due to injury or chronic illness
- Fight America's opioid epidemic

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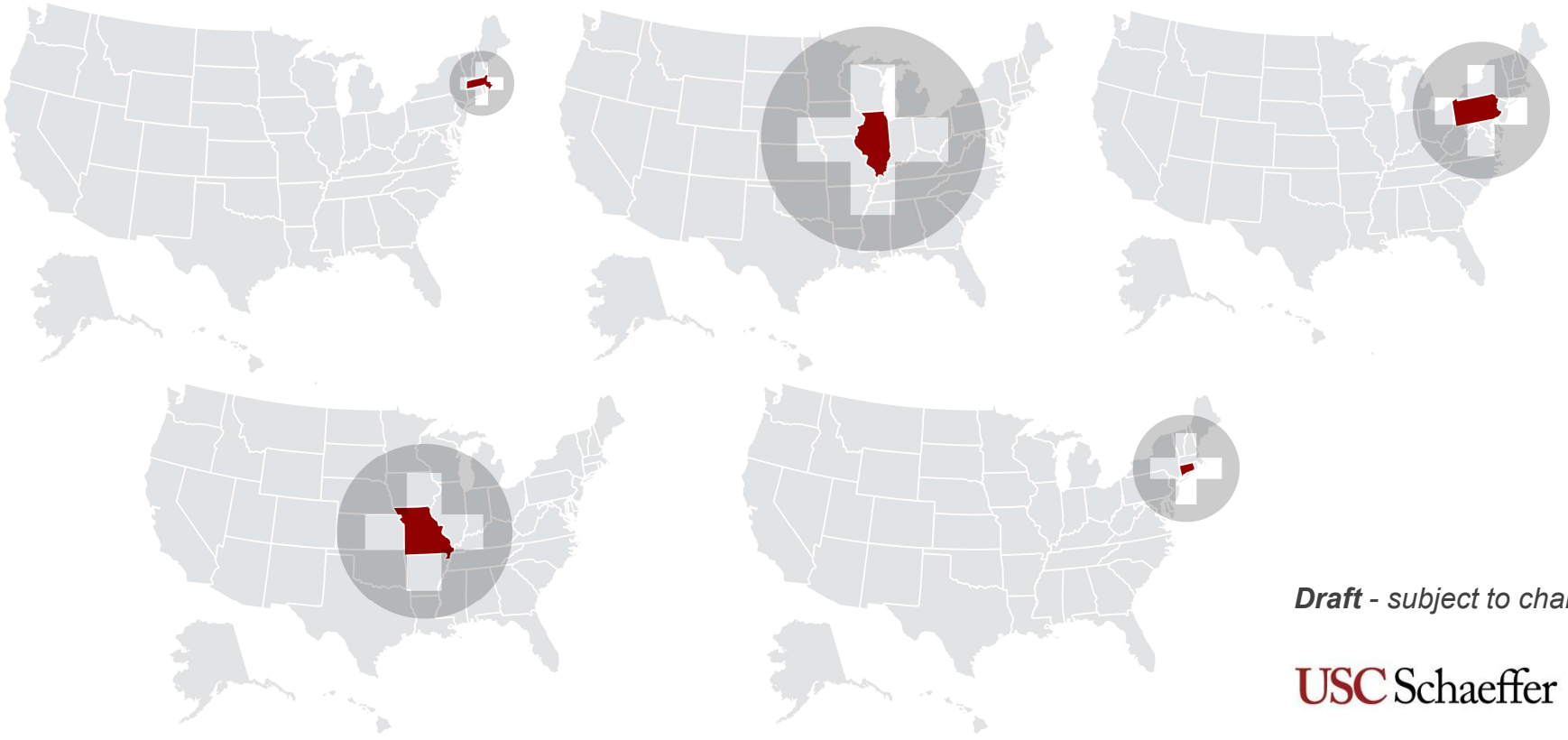
What have we been dong?

Keck Schaeffer Initiative for Population Health Policy with BHECON

Late 2015 – Became involved with BHECON

Since then, producing chartbooks quantifying key demographic and economic aspects of behavioral health at the state level



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KEY OBJECTIVES OF CHARTBOOKS

QUANTIFY THE POPULATION LIVING WITH MENTAL ILLNESS

REVIEW MENTAL HEALTH CARE COVERAGE, UTILIZATION & COSTS

- Medicaid & mental health care needs
- Unmet mental health care needs
- Hospital utilization & charges
- State mental health funding for community-based programs

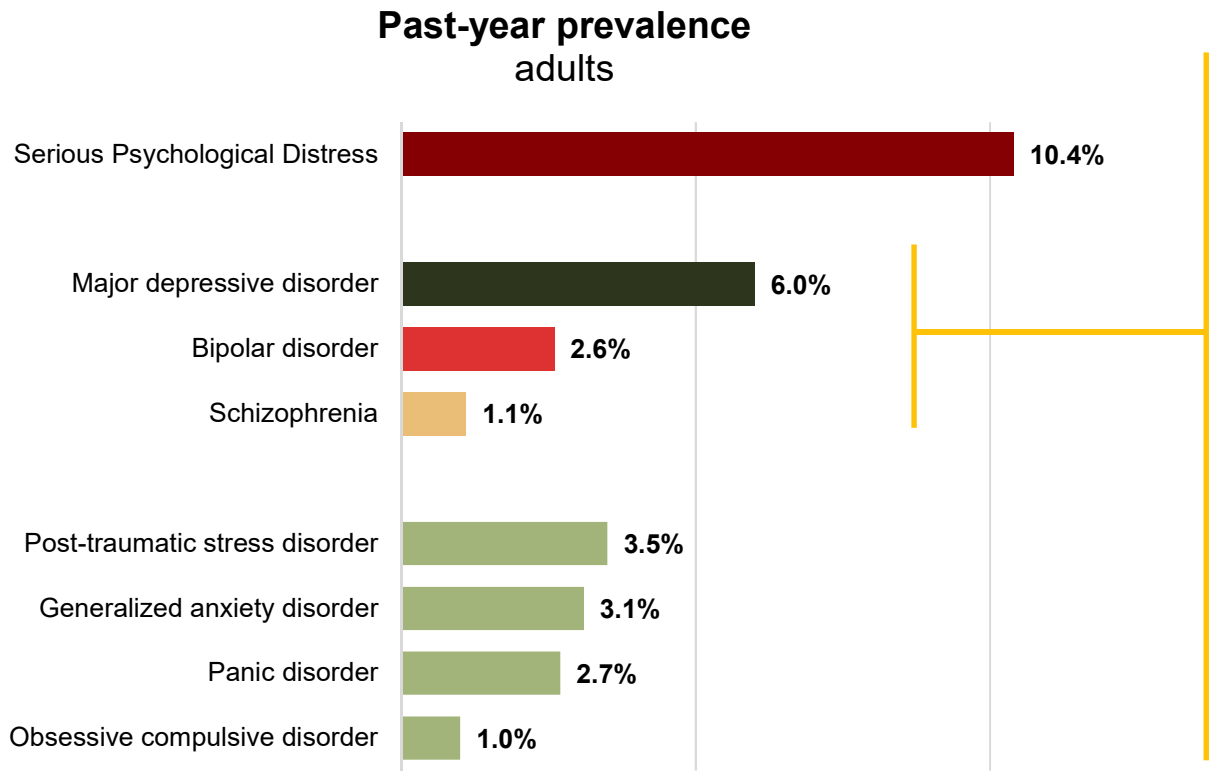
DESCRIBE SUPPLY OF MENTAL HEALTH CARE PROVIDERS

EXAMINE INTERACTION BETWEEN THE CRIMINAL JUSTICE SYSTEM & PERSONS SUFFERING FROM MENTAL ILLNESS

SUMMARIZE TOTAL ECONOMIC BURDEN OF SERIOUS MENTAL ILLNESS

QUANTIFY THE POPULATION LIVING WITH MENTAL ILLNESS

PREVALENCE - UNITED STATES 2015



Many mental health conditions are fairly common in the general population.

Of the three conditions that are often labeled as Serious Mental Illness (SMI), major depressive disorder is the most prevalent, followed by bipolar disorder and schizophrenia.

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

Source: National Survey on Drug Use and Health (NSDUH) 2015 (SPD), NSDUH Mental Health Surveillance Study 2008-2012 (major depressive disorder) and National Institutes of Mental Health (other conditions – see appendix for original sources)

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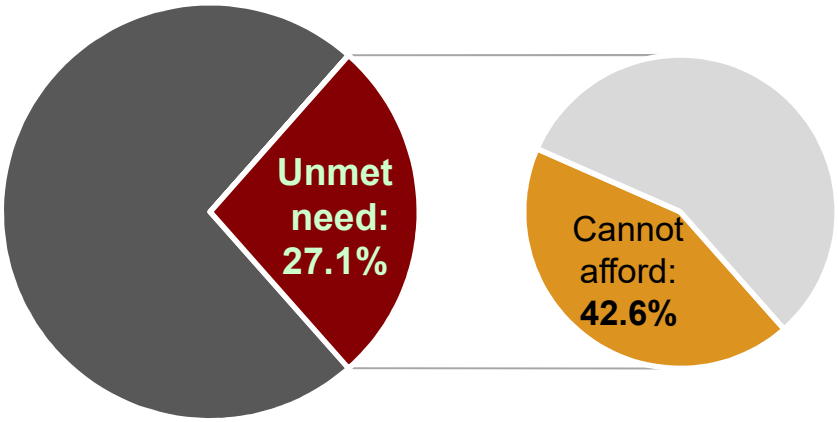
REVIEW MENTAL HEALTH CARE COVERAGE, UTILIZATION & COSTS

UNITED STATES 2015- UNMET NEED

Among adults who experienced **Serious Psychological Distress** during the past year:



27.1% indicates an **unmet need of mental health treatment**

And 42.6% 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.

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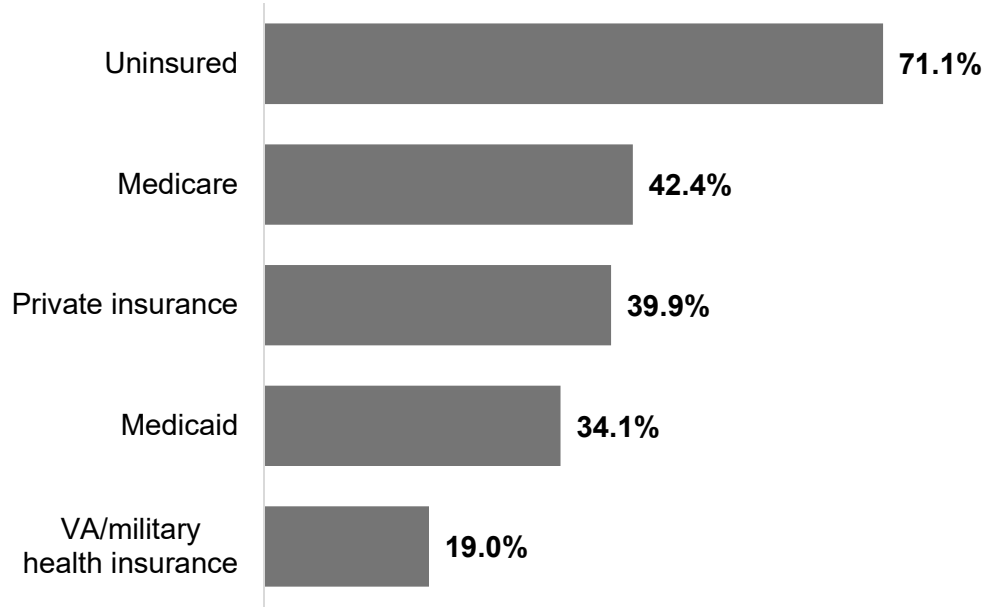
Source: National Survey on Drug Use and Health (NSDUH) 2015

REVIEW MENTAL HEALTH CARE COVERAGE, UTILIZATION & COSTS

UNITED STATES 2015- UNMET NEED / INSURANCE

Percentage of adults with past-year Serious Psychological Distress and unmet need of treatment,
who could not afford mental health care



The extent to which cost was a factor in driving unmet need for mental health care varied by insurance status. People without health insurance were most affected by the inability to afford mental health treatment 71.1%

Alternatively, 19% of uninsured patients with SPD had unmet need due to cost compared with 9.6% with Medicaid, 11.1% for private insurance

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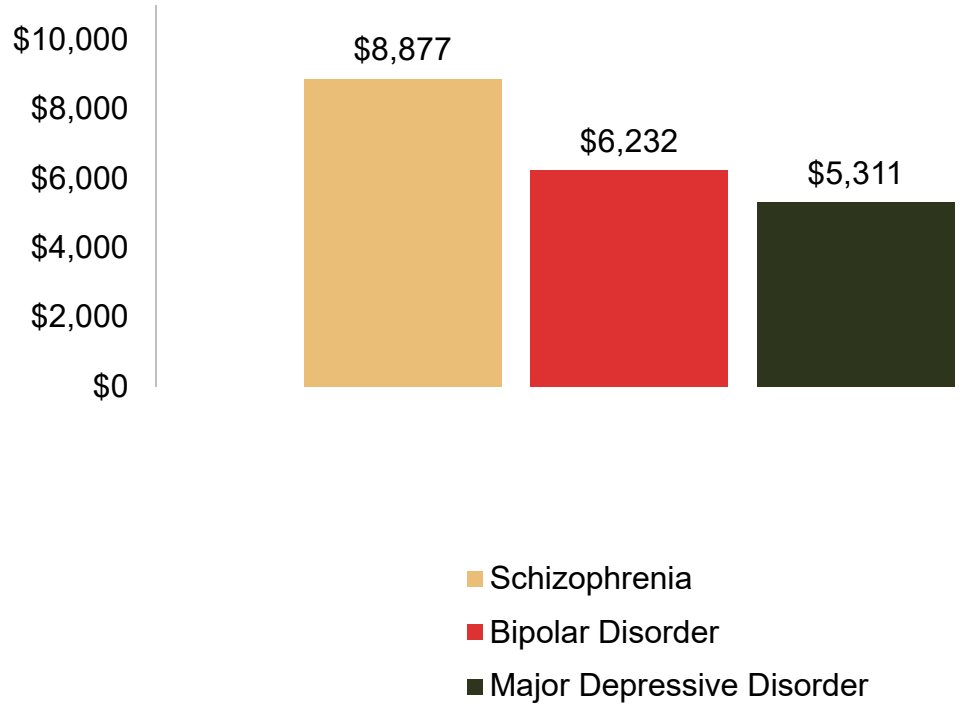
Source: National Survey on Drug Use and Health (NSDUH) 2015

HOSPITAL UTILIZATION & CHARGES

UNITED STATES 2014

Average hospital cost/stay
(all ages, in 2015 U.S. $)



The average cost for a hospitalization in the U.S. ranged from more than $5,000 to almost $9,000 per stay for patients with serious mental illness. This is despite ***a general absence of procedures or surgeries*** *during a hospitalization for symptoms of serious mental illness.*

Source: Health Care Utilization Project (HCUPnet) 2014

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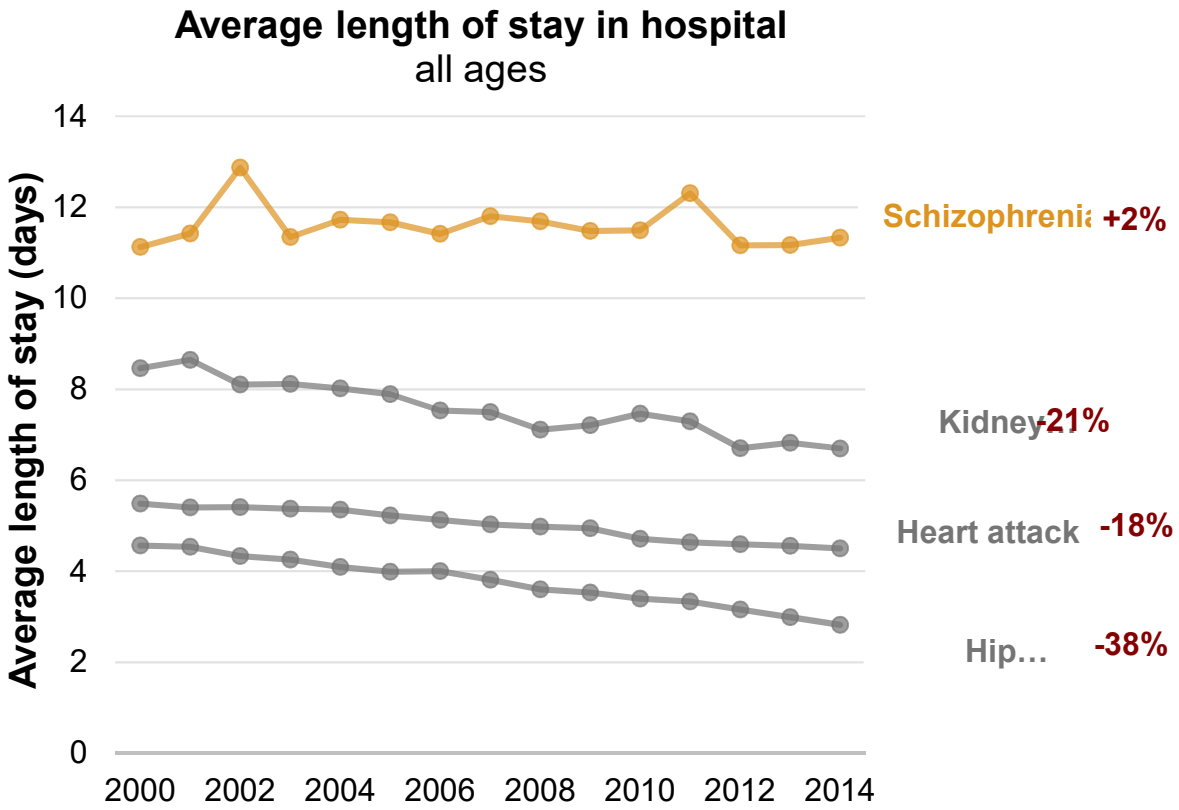
HOSPITAL UTILIZATION & CHARGES

UNITED STATES 2000-2014- Trends in length of hospital stay



The average length of stay for a schizophrenia hospitalization was longer than those for kidney transplants, heart attacks or hip replacement surgeries. Moreover, the average duration for these other conditions all declined by at least 18% from 2000 to 2014 while for schizophrenia the duration increased slightly.

Source: Health Care Utilization Project (HCUPnet) 2014

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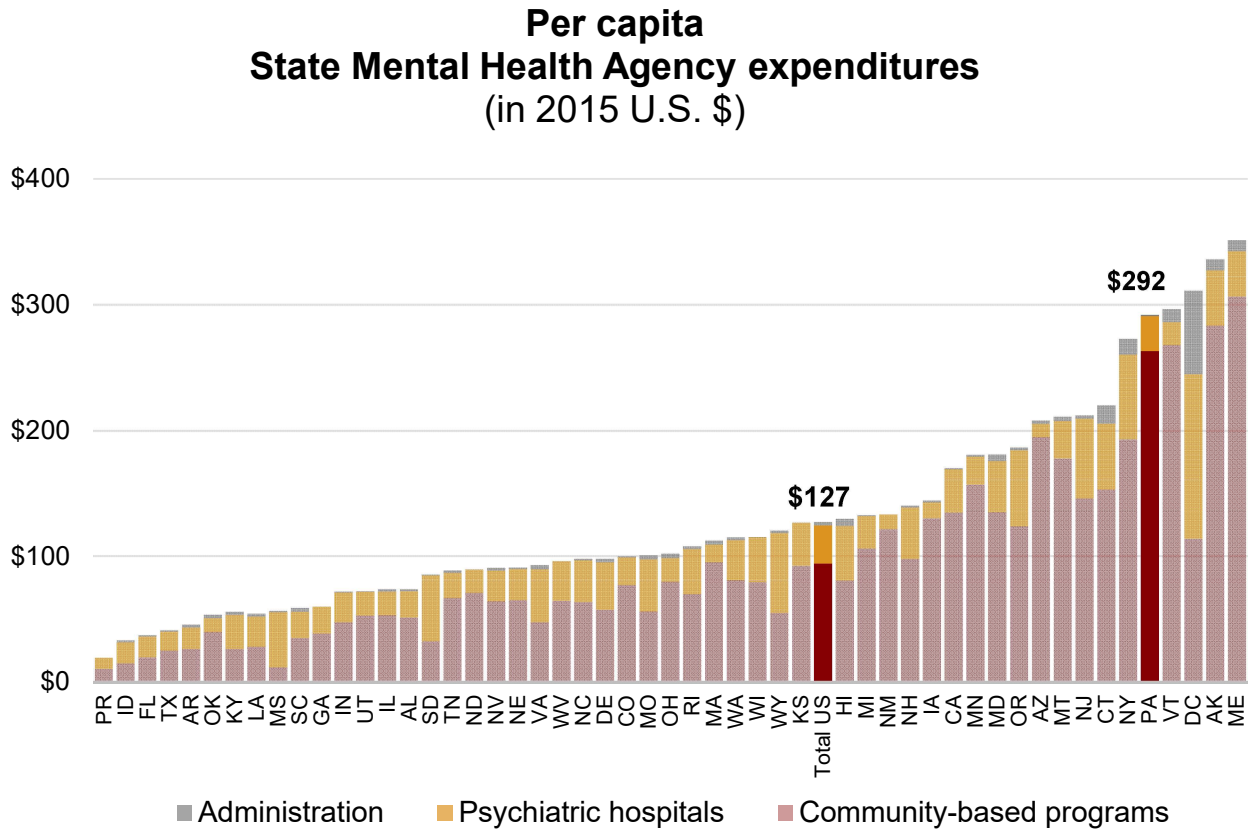
REVIEW MENTAL HEALTH CARE COVERAGE, UTILIZATION & COSTS

PENNSYLVANIA AND UNITED STATES 2013- State mental health funding



Pennsylvania's state mental health agency spends a higher per capita amount on mental health services compared to the rest of the U.S.

Expenditures include (U.S. average):

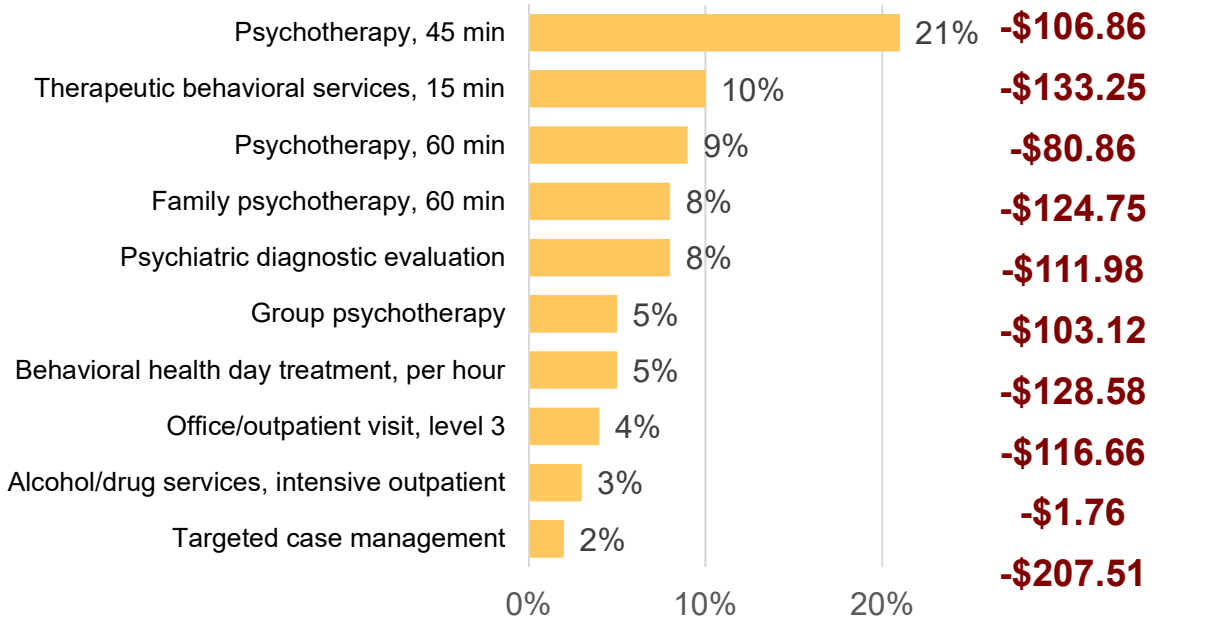
- *72% Community-based mental health programs funded and/or operated by state mental health agencies*
- *26% Mental health services in state psychiatric hospitals*
- *2% Administration/training/ research/evaluation to support these services*

Source: State Mental Health Agency-Controlled Expenditures for Mental Health Services, FY 2013 National Association of State Mental Health program Directors Research Institute, Inc (NRI)

REVIEW MENTAL HEALTH CARE COVERAGE, UTILIZATION & COSTS

(only available in CONNECTICUT 2014) – Cost Margins for Behavioral Healthcare

Top 10 procedures by volume
selection of CT community providers serving Medicaid patients



Margin per hour
-$106.86
-$133.25
-$80.86
-$124.75
-$111.98
-$103.12
-$128.58
-$116.66
-$1.76
-$207.51

The 10 most utilized behavioral health services account for 75% of total service hours by community providers.

*The service delivery cost for these procedures is higher than the revenue under Medicaid rates, resulting in **negative margins** and providers operating at a loss.*

*The **annual loss** for these procedures is more than $27 million for approximately 250,000 service hours.*

Source: Prioritizing Community Based Services in CT, CT Community Providers Association, February 2015

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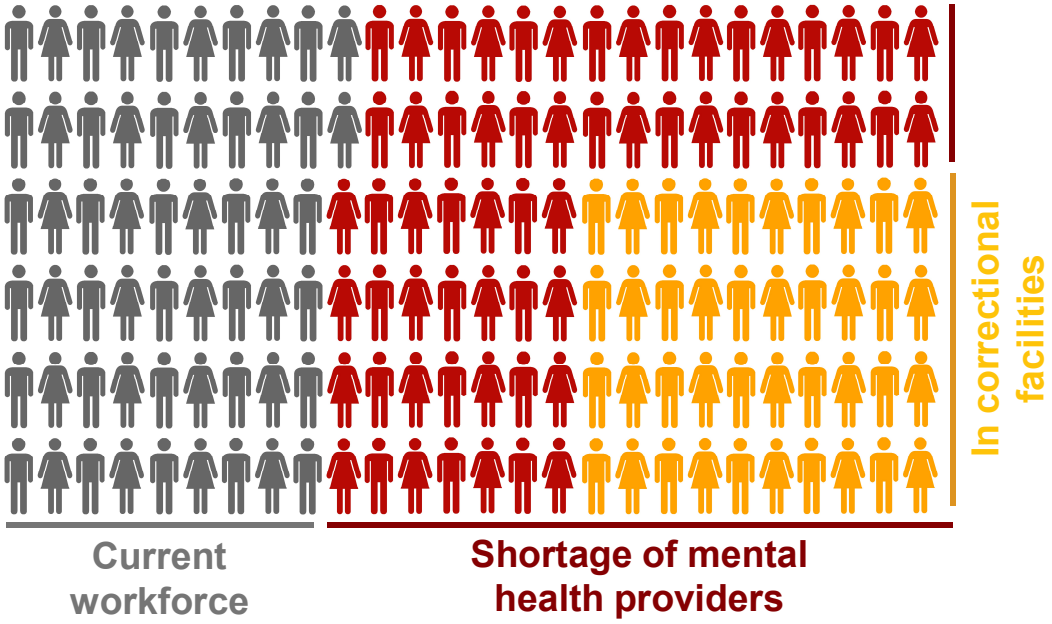
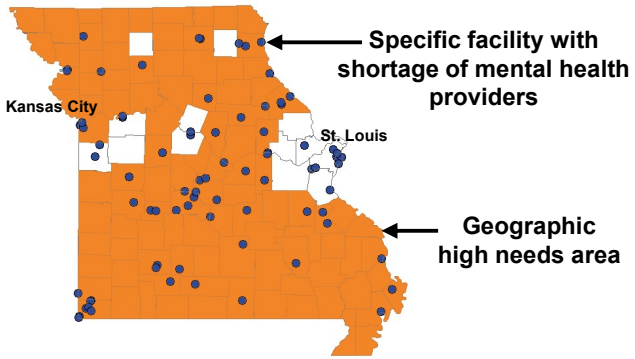
DESCRIBE SUPPLY OF MENTAL HEALTH CARE PROVIDERS

MISSOURI 2016 – Shortage areas





Mental health care providers:
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

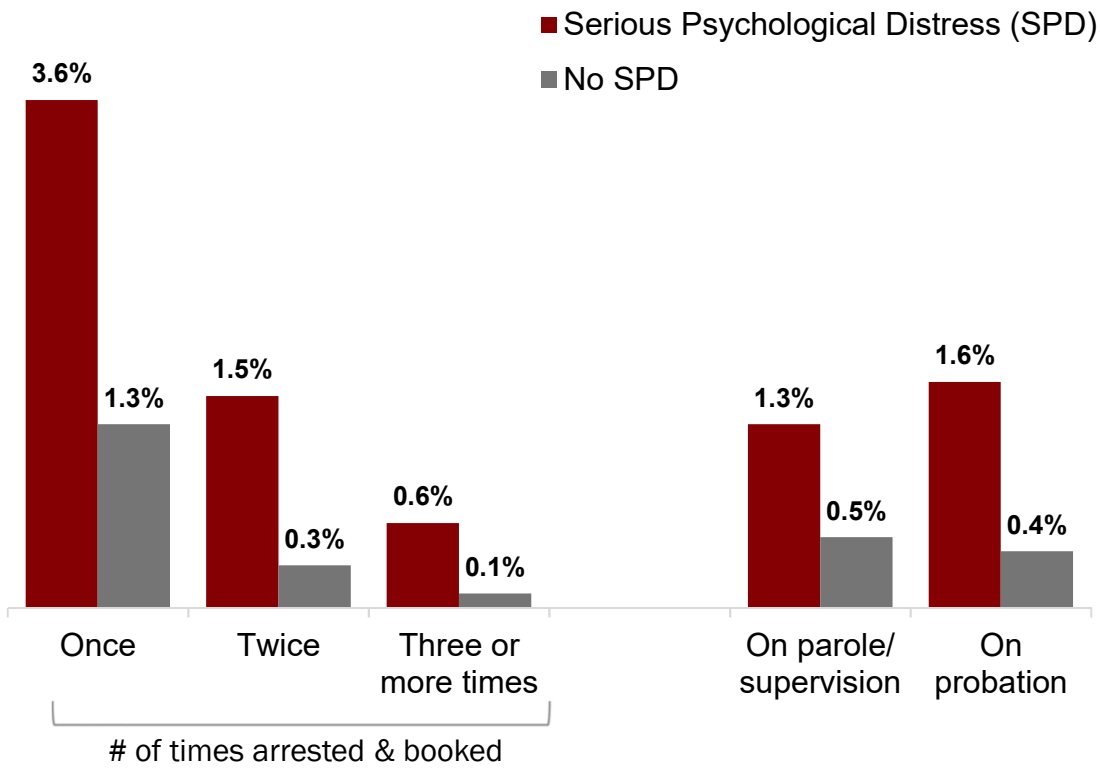
Geographic high needs area based on population-to-provider ratio, poverty levels, elderly and youth ratio, alcohol and substance abuse prevalence, and travel time to nearest source of care outside area

Currently, Missouri has 56 full-time equivalent mental health providers in designated shortage areas. In order to address the shortage issue, 100 more full-time providers are needed in these areas, 40 of whom in correctional facilities. 46.1% of the total population of Missouri resides in designated shortage areas (2,810,768 people)

Source: Health Professional Shortage Areas (HSPA), HRSA Data Warehouse data as of 7/31/2016

CRIMINAL JUSTICE SYSTEM & PERSONS SUFFERING FROM MENTAL ILLNESS

UNITED STATES 2015



People who experienced Serious Psychological Distress (SPD) are more likely to have been arrested or be on parole or probation in the past year.

An alternate way to express this is: Of all people arrested once, 24% experienced SPD. For those arrested > 1 time, 38% experienced SPD

Finally, among all persons arrested ≥1 28.4% had SPD compared with 10.1% of those not arrested

Source: National Survey of Drug Use and Health (NSDUH) 2015
Survey does not include current institutionalized population

CRIMINAL JUSTICE SYSTEM & PERSONS SUFFERING FROM MENTAL ILLNESS

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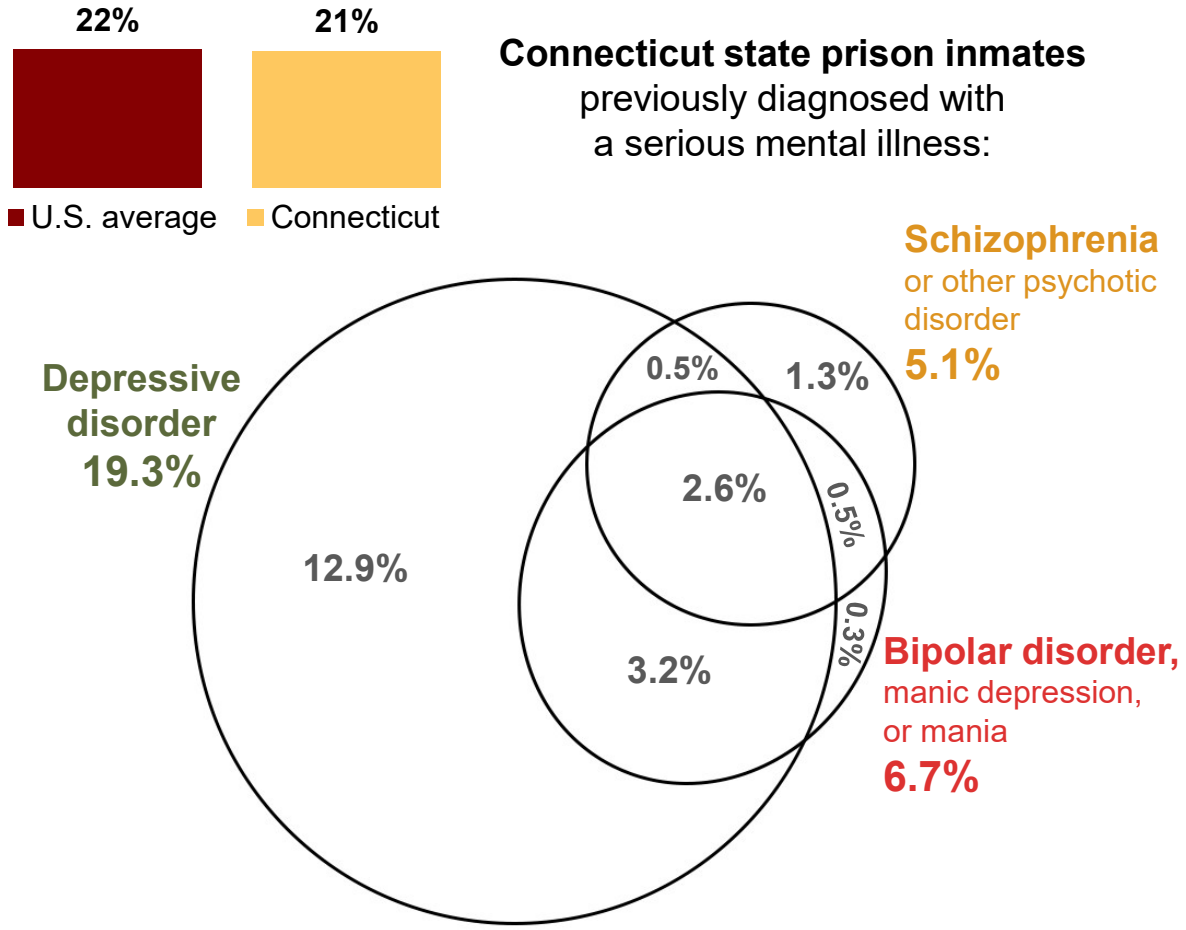

In Connecticut state prisons, approximately 21% of prison inmates previously have been diagnosed with a serious mental illness, which is similar to the overall U.S. prison population. Many patients have been diagnosed with two or three mental illnesses, confirming the presence of overlap in symptoms in this population.

Source: Survey of Inmates in State Correctional facilities, BJS, 2004. Includes juveniles
Due to rounding, percentages of separate parts may not add up to the total percentage

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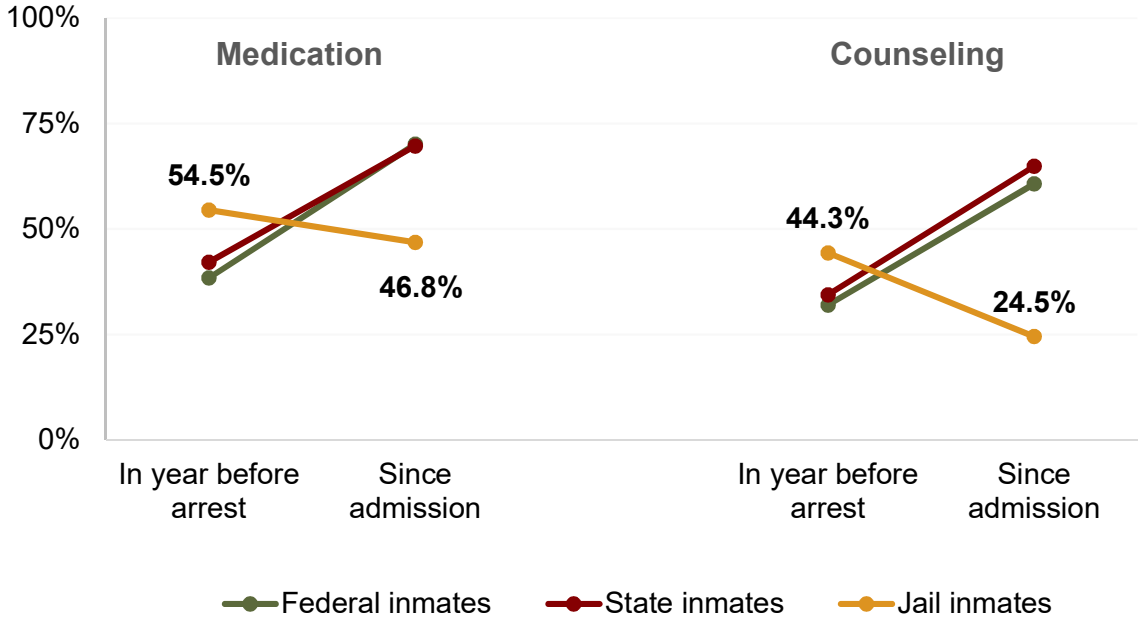
CRIMINAL JUSTICE SYSTEM & PERSONS SUFFERING FROM MENTAL ILLNESS

UNITED STATES – Treatment before and after incarceration

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



The increase in mental health care treatment in federal and state prisons after admission to prison suggests that these institutions are making up for the gaps in mental health treatment in the regular health care system.

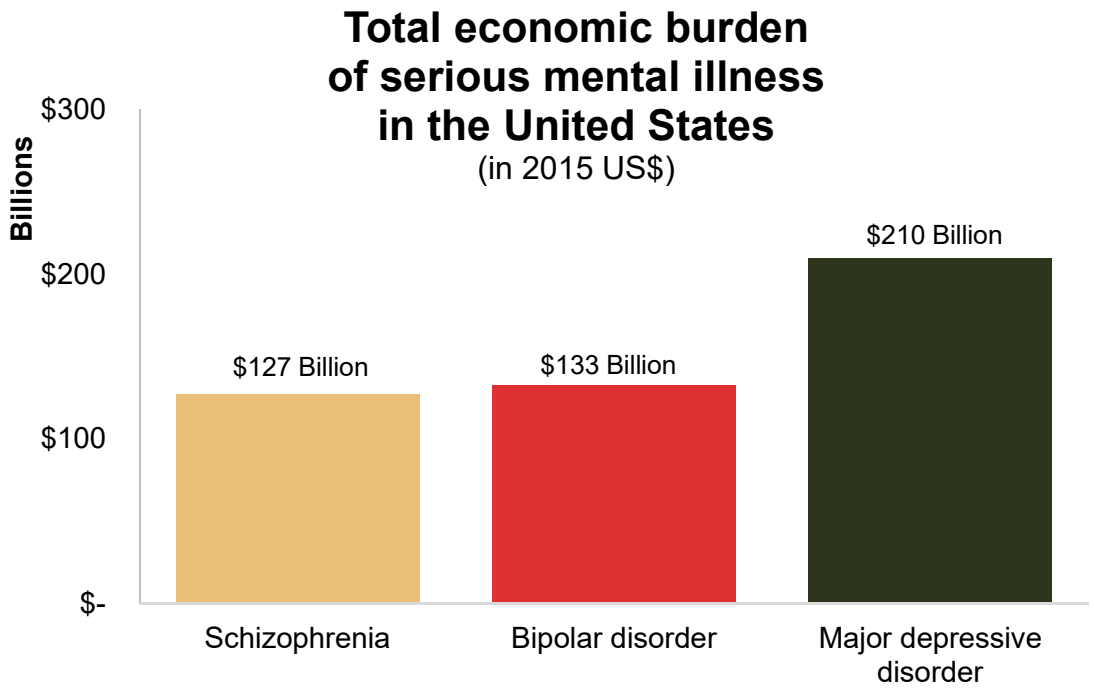
At the same time, local jail inmates do not have the same access to medication and counseling while incarcerated as federal and state prisoners.

Mental health conditions include prior diagnosis of depressive disorder, bipolar disorder, and/or schizophrenia. Medication and counseling data includes treatment for any mental illness.

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

TOTAL ECONOMIC BURDEN OF SERIOUS MENTAL ILLNESS

UNITED STATES 2015



*The economic burden of schizophrenia, bipolar disorder, and major depressive disorder in adults in the U.S. is estimated to be at least **125 billion dollars 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

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Chartbook Challenges

Inconsistent ability to generate state-specific estimates

No readily available data for key measures

Most info limited to Schizophrenia, Major Depression and Bipolar Disorder

Data 'stale' in some cases

Variable outcome definitions

Unclear what findings are most relevant

Unable to generate 'primary' data conduct primary analyses

Where are we going?

Keck Schaeffer Initiative for Population Health Policy and BHECON

Bridge the gap between our academic interests and expertise and the practical information needed to advocate for and treat persons with behavioral health conditions

Identify additional data sources that partner states have found useful

Discuss opportunities for primary data collection across states (surveys etc.)

Establish the outline of a research agenda reflecting both the short term and long term needs of the community of behavioral health providers and advocacy groups

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