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# MEDICAID EXPANSION'S IMPACT ON THE KANSAS BEHAVIORAL HEALTH SYSTEM AND USERS OF BEHAVIORAL HEALTH SERVICES

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JANUARY 2023


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# Executive Summary

*Figure ES-1* presents the key findings detailed in this report.

*Figure ES-1*. **Key Findings by Research Question**

| Research Question | Key Findings |
|---|---|
| How many Kansas adults age 19 to 64 who may newly enroll in Medicaid if expanded will utilize behavioral health services? | • Of the 108,800 adults expected to newly enroll in Medicaid if expanded, an estimated 24,154 are likely to use behavioral health services once enrolled. |
| What is the financial value to behavioral healthcare providers (including specifically those operating as certified community behavioral health clinics) in Kansas of the services that may be provided to adults newly enrolled in KanCare? | • Medicaid expansion is estimated to increase annual revenues for behavioral health providers from Medicaid claims by $87.1 million, a net revenue increase of $62.6 million.<br>• Medicaid expansion is estimated to increase Medicaid annual revenues for community mental health centers (CMHCs) by $17.9 million – $6.6 million more than would be expected if Kansas had not implemented the certified community behavioral health clinic (CCBHC) model. |
| Does Medicaid expansion have other non-financial direct effects on behavioral health providers? | • Psychiatric hospitals with less than 16 beds and other facilities treating behavioral health conditions are more likely to accept Medicaid in Medicaid expansion states as compared to non-expansion states.<br>• Federally qualified health centers in expansion states had average increases of 1,500 visits overall and 1,000 mental health visits per year as compared to non-expansion states. |
| Does Medicaid expansion offset other costs that are incurred by state and local governments and the state economy because of untreated behavioral health problems? | • Medicaid expansion has been associated with fewer arrests and reduced rates of rearrest. A reduction in arrests may lead to reduced spending at county jails in Kansas and reduced incarceration in the criminal justice system.<br>• Medicaid expansion has been associated with a reduction in childhood neglect and a corresponding reduction in foster care entries for neglect as compared to non-expansion states.<br>• Medicaid expansion states experienced a 32.0 percent reduction in foster care admissions related to neglect as compared to non-expansion states. Applying the reduced rate experienced in expansion states to 2022 Kansas foster care data equates to an estimated 305 fewer children entering the foster care system in Kansas because of neglect. |

# Introduction

Medicaid is among the largest purchasers of behavioral health services in the United States and in Kansas. If Kansas were to expand the Medicaid program under the terms of the Affordable Care Act (ACA), the outcome also would expand Medicaid's role in the behavioral health system in Kansas. The Alliance for a Healthy Kansas contracted with the Kansas Health Institute (KHI) to study the impact that Medicaid expansion might have on the behavioral health system in Kansas.

This report provides an analysis and literature review on the direct effect that Medicaid expansion could have on resources in the behavioral health system and the indirect effects that treating behavioral health conditions through Medicaid expansion might have on costs incurred by state and local governments. The analysis uses the most recent KHI estimates of new adult enrollment in Medicaid if expanded and data from the *National Survey on Drug Use and Health* from the Substance Abuse and Mental Health Services Administration (SAMHSA) to estimate the number of adults in Kansas who would newly enroll in Medicaid after expansion and use behavioral health services. The net change in revenue to behavioral health providers is estimated using Kansas Medicaid claims and an analysis conducted by SAMHSA on the potential effects of Medicaid expansion on behavioral health spending. A literature review was conducted to assess direct effects of expansion on behavioral health providers other than changes in revenue and the indirect effects of treating behavioral health needs through Medicaid expansion on other public services.

The findings in this report are organized into two sections. *Medicaid Expansion's Impact on Behavioral Health Providers* contains analysis and literature review on the direct effects that Medicaid expansion could have on behavioral health provider revenues, the demand for behavioral health services and the supply of behavioral health providers. *The Impact on State and Local Governments of Treating Behavioral Health Conditions through Medicaid Expansion* provides a summary of the literature on the effect that treating behavioral health needs through Medicaid expansion may have on county jails and the foster care system in Kansas. A detailed description of the data analysis and literature review methodology and citations for the studies included in the literature review are included in *Appendix A* (page A-1).

# Overview of the Kansas Behavioral Health System

Behavioral healthcare is defined by the Substance Abuse and Mental Health Services Administration (SAMHSA) as "the promotion of mental health, resilience and well-being; the treatment of mental and substance use disorders; and the support of those who experience and/or are in recovery from these conditions, along with their families and their communities."

An explainer from the Commonwealth Fund notes that core behavioral health services typically include a combination of:

- Screening, brief intervention, and referral to treatment (SBIRT) for substance use disorders;
- Psychotherapy;
- Prescribed medications and devices;
- Partial or complete inpatient stays or residential treatment;
- Case management and care coordination services;
- Outreach and engagement services for people disconnected from care;
- Skills development and assistance with employment, education, and housing;
- Peer support groups, one-on-one peer support services, and other social supports;
- Education, engagement, and services for family members or others important to recovery; and
- Mobile crisis teams and other crisis response services.

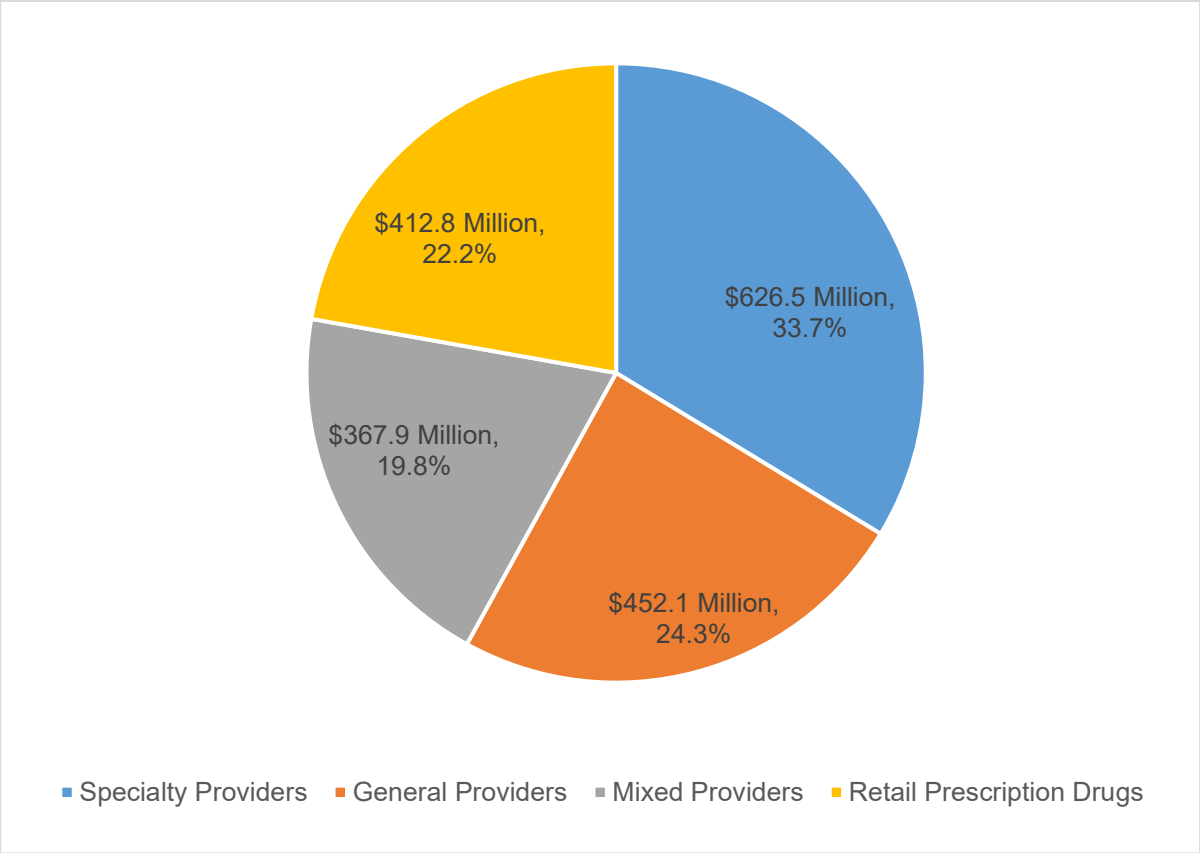
Behavioral health services are provided by specialty providers, including psychiatrists, psychologists, psychiatric nurse practitioners, counselors, social workers, and marriage and family therapists. Non-specialty providers, such as primary care physicians and community hospitals also may provide behavioral health services — sometimes out of necessity, when other providers are unavailable.

Other important behavioral health providers are case managers, occupational therapists, peer support specialists, recovery coaches, child development specialists, and community health workers. Behavioral health services can be delivered in clinical settings as well as in schools and other settings. In addition, community-based organizations are a source of nonclinical supports, sometimes provided by individuals who have had behavioral health conditions themselves.[1]

*Figure 1* provides the most recent analysis from SAMHSA (2015) of the distribution of behavioral health spending by provider, adapted to estimated spending in Kansas.

Total spending for mental health and substance use disorder in the U.S. was $194.0 billion in 2015 – 7.3 percent of personal healthcare spending ($2,674.1 billion). In 2019 (the data year used throughout this report), personal healthcare spending in Kansas was $25.5 billion. Assuming the same spending distribution as the national estimate, total mental health and substance use disorder spending in Kansas was approximately $1.9 billion in 2019.

*Figure 1.* **Estimated Spending by Specialty, General, and Mixed Providers for Mental Health and Substance Use Disorders in Kansas, 2019**




Note: Total behavioral health expenditures in Kansas in 2019 are estimated to be $1.859 billion. The estimate was derived by multiplying estimated Kansas healthcare expenditures in 2019 by the share of spending on behavioral health services calculated from national estimates in 2015. Specialty Providers include specialty units in general hospitals, specialty hospitals, psychiatrists, specialty mental health centers, specialty substance abuse centers and other behavioral health providers such as psychologists, counselors, and social workers. General providers include non-specialty care at general hospitals, nonpsychiatric physicians, freestanding nursing homes and freestanding home health. Mixed providers include clinics, such as federally qualified health centers, and other public health activities.

*Source: Kansas Health Institute analysis of SAMHSA Behavioral Health Spending and Use Accounts 2006–2015 published at https://store.samhsa.gov/product/Behavioral-Health-Spending-and-Use-Accounts-2006-2015/SMA19-5095 and Centers for Medicare & Medicaid Services Health Expenditures by State of Residence (2020 update).*

As shown in *Figure 1* (page 3), Kansas spending by provider type in 2019, using the 2015 national percentages in total spending for behavioral health services across all payers, is estimated to be:

- $626.5 million for specialty providers, which includes specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers;
- $452.1 million for general providers, which includes non-specialty units in general hospitals, nonpsychiatric physicians, home health, and nursing homes;
- $367.9 million for mixed providers, which includes providers that offer specialty and non-specialty services such as federally qualified health centers; and
- $412.8 million for retail prescription drugs.

KanCare MCOs paid claims of $510.6 million (26.9 percent of total estimated behavioral health spending in Kansas) across all providers for goods and services related to mental health or substance use disorder conditions in 2019. KanCare's role in the behavioral health system is expected to increase if Kansas expanded Medicaid under the terms of the ACA.

# Medicaid Expansion's Impact on Behavioral Health Providers

The analysis and literature review of the direct effect that Medicaid expansion has on behavioral health providers found that expanding Medicaid in Kansas would likely:

1. Increase revenue for behavioral health providers;
2. Increase the number of behavioral health providers accepting Medicaid patients; and
3. Increase the number of visits per user of behavioral health services.

These effects are expected to be concentrated among providers most likely to treat behavioral health needs. Expanding Medicaid would both increase the share of Medicaid spending on behavioral health services and increase the total amount spent on services in the state because Medicaid would reimburse for care that is currently uncompensated and covers additional services that private insurance may not cover.

## *Medicaid Expansion is Expected to Increase Revenue in the Behavioral Health System*

If Medicaid were expanded under the terms of the ACA, an estimated 108,800 adults would newly enroll in Medicaid. Of these new enrollees, 66,861 would be previously uninsured and 41,939 would previously have had private coverage. SAMHSA's National Survey on Drug Use and Health estimates that 9.9 percent of uninsured adults age 19 to 64 with income below 200 percent of the federal poverty level (FPL) and 16.2 percent of privately insured adults age 19 to 64 with income below 200 percent FPL used behavioral health services.[2] After expansion, new Medicaid enrollees are assumed to use services at the same rate as Medicaid enrollees age 19 to 64 with income below 200 percent FPL (22.2 percent). A report from the U.S. Government Accountability Office suggests that this assumption is within the range of experience for behavioral health services users among Medicaid expansion enrollees based on four states studied in the first year of expansion (20 percent in New York to 34 percent in Iowa).[3]

Applying the national estimate for the percent of behavioral health service users to the number of expected new enrollees if Medicaid were expanded in Kansas suggests that 24,154 new Medicaid enrollees would receive treatment for behavioral health conditions. This number could be as high as 36,992 if experience in Kansas is more like Iowa or West Virginia where 33 to 34 percent of enrollees used services. In 2019, KanCare paid $3,605 per behavioral health service user age 19 to 64 who was not dually eligible for Medicare and Medicaid and was not enrolled through a waiver program. Assuming similar average payments for Medicaid expansion enrollees, providers would receive an additional $87.1 million per year in funding from Medicaid after expansion – a 17.1 percent increase from the current Medicaid spending per year on behavioral health services. *Figure 2* provides a summary of the additional Medicaid funding available to behavioral health providers if Medicaid is expanded in Kansas.

*Figure 2.* **Annual Medicaid Payments for Treatment of Behavioral Health Conditions Among Adults Newly Enrolled in Medicaid If Expanded**

| New Adult Medicaid Enrollees | Number Using Any Behavioral Health Services | Medicaid Payments per Behavioral Health Service User | Total Medicaid Payments for Newly Enrolled Adults |
|---|---|---|---|
| 108,800 | 24,154 | $3,605 | $87,073,728 |

Note: Payments per person calculated from KanCare claims with a primary diagnosis categorized as mental health or substance use disorder. Only claims for adults age 19 to 64 not dually eligible for Medicare and Medicaid and not enrolled through a waiver program were included. The estimated number of users is based on national estimates of behavioral health service users among Medicaid only adults age 19 to 64 with income below 200 percent FPL.
*Source: Kansas Health Institute analysis of the Census Bureau's 2019 American Community Survey Public Use Microdata Sample (PUMS), KanCare claims provided by the Kansas Department of Health and Environment, and the National Survey on Drug Use and Health from the Substance Abuse and Mental Health Services Administration.*

Many who would newly enroll in Medicaid if expanded are already using behavioral health services. On net, Medicaid expansion is estimated to increase claims-based revenue for Kansas behavioral health providers by $62.6 million. *Figure 3* (page 7) provides an estimate of the annual net change in revenue for Kansas behavioral health providers after Medicaid expansion. Claims-based provider revenues are expected to increase from a higher per person payment for Medicaid enrollees who were previously uninsured and who were previously covered by private insurance as well as additional people who will use services once they enroll in Medicaid. Per person payments are expected to be higher in Medicaid because of additional services that may be covered by Medicaid but not covered by private payers or paid for out-of-pocket. Uncompensated care for behavioral health services in community outpatient settings are now covered in part by federal block grants administered by the Kansas Department for Aging and Disability Services (KDADS). No changes in the block grant funding are assumed in these estimates. In fiscal year 2019, $12.2 million was distributed for substance use disorder prevention and treatment and $5.1 million was distributed for community mental health services.[4] States that expanded Medicaid have been able to repurpose block grant funds that currently cover outpatient services to cover services not typically covered by Medicaid.

SAMHSA's report, *"Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010-2020,"* provides calculations of the average annual per person payments for behavioral health services among enrollees in Medicaid, private insurance and for the uninsured in 2011.[5] Among private health insurance enrollees, payments for mental health services in 2011 were 36.9 percent of Medicaid and substance use disorder services were 87.7 percent of Medicaid. Among the uninsured, payments are assumed to be 59 percent of Medicaid for both mental health and substance use disorder services. Taking the ratio of private insurance payments and uninsured payments to Medicaid payments and multiplying that by the calculated KanCare claims payment per user for all behavioral health users in 2019 ($4,007) allows for an estimate of per person spending for behavioral health services in Kansas among the privately insured and the uninsured. In addition to estimating average per person spending before enrolling in Medicaid, the estimate also assumes that new enrollees who previously reported an unmet behavioral health need because of a lack of insurance coverage, or a lack of adequate insurance coverage, will seek additional services. The assumed increase in utilization among those newly enrolled in Medicaid is reflected in the number of users after Medicaid expansion.

*Figure 3.* **Net Impact of Medicaid Expansion on Annual Claims-Based Revenue for Services to Treat Mental Health and Substance Use Disorder Conditions**

| Insurance Status | New Adult Medicaid Enrollees | Before Expansion | | After Expansion | | Net Change in Revenue (millions) |
|---|---|---|---|---|---|---|
| | | Number Using Services | Total Revenue (millions) | Number Using Services | Total Revenue (millions) | |
| Uninsured | 66,861 | 6,586 | $15.6 | 14,843 | $53.5 | $37.9 |
| Privately Insured | 41,939 | 6,798 | $8.9 | 9,310 | $33.6 | $24.7 |
| Total | 108,800 | 13,384 | $24.5 | 24,154 | $87.1 | $62.7 |

Note: Spending per behavioral health user is estimated to be $2,364 for users who are uninsured, $1,307 for users covered by private insurance and $3,605 for users covered by Medicaid. Before expansion, an estimated 16.2 percent of privately insured and 9.9 percent of uninsured adults used behavioral health services based on national estimates. After expansion, 22.2 percent of newly enrolled adults are expected use behavioral health services, consistent with the estimated rate of use in Medicaid nationally.

*Source: Kansas Health Institute analysis of the Census Bureau's 2019 American Community Survey Public Use Microdata Sample (PUMS), KanCare claims provided by the Kansas Department of Health and Environment, Data provided in SAMHSA's "Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010-2020."*

*Figure 4* (page 8) provides estimates of the net change in annual claims-based revenue from Medicaid expansion by provider type according to the spending distribution shown in *Figure 1* (page 3). Medicaid expansion is expected to increase revenue for behavioral health services and products across all provider types. Specialty providers (specialty units of general hospitals, specialty hospitals, psychiatrists, other professionals, specialty mental health centers, and specialty substance abuse centers) are expected to have the largest net increase in revenue after Medicaid expansion ($21.1 million). General providers (non-specialty units in general hospitals, nonpsychiatric physicians, home health, and nursing homes) are expected to have the second largest increase ($15.2 million) followed by retail prescription drugs ($13.9 million) and mixed providers ($12.4 million), which includes clinics that provide both specialty and non-specialty services such as federally qualified health centers.

*Figure 4.* **Estimated Change in Claims-Based Revenue for Behavioral Health Services After Implementation of Medicaid Expansion in Kansas by Provider and Service Type**

| Provider Type | Estimated Revenue Before Expansion (millions) | Estimated Revenue After Expansion (millions) | Net Change in Revenue (millions) |
|---|---|---|---|
| Specialty Providers | $8.2 | $29.3 | $21.1 |
| Non-Specialty Providers | $5.9 | $21.2 | $15.2 |
| Mixed Providers | $4.8 | $17.2 | $12.4 |
| Retail Prescription Drugs | $5.4 | $19.3 | $13.9 |
| Total | $24.5 | $87.1 | $62.6 |

Note: The spending distribution by provider is adapted from the distribution in *Figure 1*, page 3. Providers are defined by SAMHSA in *Behavioral Health Spending & Use Accounts 2006–2015*. Specialty providers include services provided in specialty psychiatric hospitals known as institutions for mental disease (IMDs). Current federal regulations indicate how states can allow MCOs to pay for treatment in IMDs as a clinically appropriate, cost-effective substitution for a similar covered service, for up to 15 days a month. No adjustments were made to this estimate to discount spending in IMDs.

*Source: Kansas Health Institute analysis of the Census Bureau's 2019 American Community Survey Public Use Microdata Sample (PUMS), KanCare claims provided by the Kansas Department of Health and Environment, and the National Survey on Drug Use and Health from the Substance Abuse and Mental Health Services Administration.*

## *Provider Specific Revenue Estimates*

Annual claims-based revenue estimates also were requested by the Alliance for community mental health centers (CMHCs), federally qualified health centers (FQHCs) and alcohol or drug rehabilitation providers. Current KanCare experience for adults age 19 to 64 who are not dually enrolled in Medicare and Medicaid and who are not enrolled through a waiver was used as the basis for the estimates.

Community mental health centers (CMHCs) are safety net providers of community-based public mental health services. In addition to a full range of outpatient clinical services, the 26 CMHCs in Kansas provide comprehensive mental health rehabilitation services, such as psychosocial rehabilitation, community psychiatric support and treatment, peer support, case management and attendant care. Based on 2019 KanCare claims, 14.4 percent of current behavioral health service users enrolled in KanCare received services from a CMHC. Assuming the behavioral health service users among Medicaid expansion enrollees use CMHC services at the same rate, an estimated 3,474 CMHC patients would be newly enrolled in Medicaid after expansion resulting in $17.9 million in additional Medicaid revenue annually.

This estimate accounts for the certified community behavioral health clinic (CCBHC) model recently implemented in Kansas. CCBHCs provide Medicaid enrollees with a comprehensive and integrated package of mental health and substance use disorder treatment services and supports and physical health services. CCBHCs are reimbursed prospectively by Medicaid when approved services are provided to Medicaid enrollees using a provider-specific bundled

daily payment rate. The projected costs used to set the daily rate are later reconciled with the actual cost. All CMHCs in Kansas are expected to become CCBHCs by 2024. The CCBHC model is expected to increase reimbursement for Medicaid-covered services.

If Kansas expanded Medicaid, more people who use behavioral health services at CMHCs would qualify for and enroll in Medicaid thereby increasing the number of people who would use CCBHC services. In other states that have adopted the CCBHC model, states on average paid $245 per day in the second year of the demonstration after reconciling the projected and actual cost according to the most recent evaluation from the Health and Human Services Assistant Secretary for Planning and Evaluation (ASPE). Based on current non-dual, non-waiver Medicaid enrollees use of CCBHC eligible services, 3,322 (95.6 percent) of the newly enrolled adults who are expected to receive services from a CMHC are expected to use CCBHC services. Based on the average daily rate reported in the second year after implementation by ASPE ($245) the CCBHC model is estimated to increase revenues for CCBHCs by $6.6 million more than would be expected after Medicaid expansion without the CCBHC model.[6]

Among current KanCare members using behavioral health services age 19 to 64 who are not dually enrolled in Medicare and Medicaid and who are not enrolled through a waiver, 7.0 percent used behavioral health services at FQHCs. Average annual spending per behavioral health service user in 2019 was $589. Assuming similar utilization rates among expected behavioral health service users in the Medicaid expansion population, 1,699 would use services at FQHCs, which would result in an estimated $1.0 million for FQHCs statewide to provide behavioral health services.

Among current KanCare members using behavioral health services age 19 to 64 who are not dually enrolled in Medicare and Medicaid and who are not enrolled through a waiver, 9.6 percent used behavioral health services at an alcohol or drug rehabilitation provider. Average annual spending per behavioral health service user in 2019 was $6,280. Assuming similar utilization rates among expected behavioral health service users in the Medicaid expansion population, 2,330 would seek services from an alcohol and drug rehabilitation provider, which would result in an estimated $14.6 million for alcohol and drug rehabilitation providers statewide.

## *Medicaid Expansion is Associated with an Increase in the Supply of Mental Health Facilities Accepting Medicaid Patients*

Medicaid expansion is associated with an increase in the percentage of facilities that accept Medicaid by 3.0 percentage points (87.3 percent pre-expansion to 90.3 post-expansion), one

study finds. While more likely to accept Medicaid, they were less likely to accept discounted care (free and/or sliding fee scale). In expansion states, prior to expansion, 76.2 percent of mental health providers had a provision for discounted care as compared to 73.2 percent after Medicaid expansion. Findings are based on the National Mental Health Services Survey, which gathers administrative data on public and private psychiatric hospitals, hospitals with psychiatric units, Veterans Affairs medical centers, residential treatment centers, community mental health centers, and outpatient, day treatment, or partial hospitalization, mental health facilities. Hospitals and residential facilities with 16 or more beds allocated to mental healthcare treatment were excluded as likely Institutions of Mental Disease (IMD).[7]

In contrast to facility-based providers, office-based psychiatrists accepting Medicaid has declined. Another study finds that office-based psychiatrists accepting Medicaid declined significantly between 2010-2011 (47.9 percent accepting) and 2014-2015 (35.4 percent accepting) across expansion and non-expansion states. Comparison of expansion states and non-expansion states, pre- and post-expansion, shows no discernable change in the likelihood of accepting new patients with Medicaid by psychiatrists, in contrast to other specialists who have increased acceptance of Medicaid patients in expansion states.[8]

## *Medicaid Expansion is Associated With an Increase in the Number of Visits to Mental Health Providers Among Those Using Mental Health Services*

Medicaid expansion increased insurance coverage for low-income Americans, many with high mental health needs. One recent article compared mental health service use trends in Medicaid expansion states with concurrent trends in non-expansion states. Researchers found an increase in the annual number of outpatient visits for mental health conditions. Before Medicaid expansion, there were 0.894 visits per person among low-income adults with a diagnosis of a mental condition or taking at least one mental health medication. In expansion states, mental health visits were 1.407 visits per person (0.513 visits increase per person) as of 2015. However, there were no significant changes in mental health related hospital stays, emergency department visits and prescription fills.[9]

One study found that, in Medicaid expansion states, federally qualified health centers (FQHCs) – outpatient clinics that qualify for specific reimbursement under Medicare and Medicaid and that provide basic health services including primary and preventive care, and enabling services to help patients access care such as outreach, transportation, and language interpretation

services – had significant growth in the proportion of Medicaid patients, a reduction in the number of uninsured patients, and an increase in visits, especially mental health visits. The proportion of Medicaid patients grew from 39 percent in 2013 to almost 48 percent in 2014 and 49 percent in 2015, while the uninsured rate fell from 30 percent in 2013 to 21 percent in 2014 and 18 percent in 2015. By comparison, FQHCs in non-expansion states had a relatively small increase in Medicaid patients (2 percentage points from 29 percent to 31 percent) and a small decrease in uninsured patients (6 percentage points from 43 percent to 37 percent). These changes could be associated with other coverage opportunities, such as subsidized plans from the ACA marketplace. While FQHCs in all states had increases in patients and visits, the increase for FQHCs in expansions states was 1,500 overall visits and 1,000 mental health visits more than the increase for FQHCs in non-expansion states from 2012 to 2015. Medicaid expansion also significantly increased the number of patients by an average of almost 1,000 patients in expansion states, as compared to non-expansion states.[10]

The changes in payer mix and increase in overall patient visits have a strong impact on the financial strength of FQHCs and their ability to provide integrated mental health services. Across all services, FQHCs in expansion states had an average increase in Medicaid revenues ($2.08 million) offset by a decrease in total grants ($0.44 million) and an increase in expenditures from new patient volume ($0.98 million) as compared to non-expansion states. Average uncompensated care for health centers in expansion states decreased by $1.19 million as compared to FQHCs in non-expansion states.[11]

# The Impact on State and Local Governments of Treating Behavioral Health Conditions through Medicaid Expansion

Treating behavioral health conditions through Medicaid expansion may indirectly benefit other public services provided by state and local governments. The following sections assess the literature on the potential impact of treating behavioral health conditions through Medicaid expansion on county jails, crime rates and the foster care system.

## *County Jails*

Kansas has 96 local jails, operated by local governments, that are statutorily responsible for holding inmates waiting for their court date or trial or serving sentences on misdemeanor and some felony charges.[12] In 2019, the U.S. Department of Justice, Bureau of Justice Statistics,

Census of Jails found that there were 161,099 jail admissions in Kansas. However, the unique number of people going to jail each year is likely much lower as the same people can be admitted multiple times. A report from the Prison Policy Initiative (PPI) found that at least 60,000 unique individuals were jailed in Kansas on average each year (2016-2017).[13] Research shows a majority of people stay in jail for one week or less (62 percent), but that many people released from jail will return within the year.[14] Nationally, PPI found more than one in four (27.7 percent) people in jail had been to jail more than once in the last year. Those who were arrested and booked more than once were more likely than those who were arrested and booked once or not at all to have moderate or severe mental illness (22.9 percent), serious psychological distress (28.6 percent), substance use disorder (44.4 percent) and to not have health insurance (25.4 percent).[15]

People who go to county and city jails are disproportionately likely to have a substance use disorder or mental health condition and lack health insurance.[16] A 2017 study from the U.S. Department of Justice, Bureau of Justice Statistics found that 64 percent of jail inmates met the criteria for serious psychological distress or had previously been told by a mental health provider that they had a mental health disorder.[1] More than 1 in 4 jail inmates met the criteria for serious psychological distress (26.4).[17] Another study from the Bureau of Justice Statistics found that nearly two-thirds (63.3%) of sentenced jail inmates met clinical criteria for drug abuse or dependence (excluding nicotine and alcohol).[18] Lack of access to community behavioral health providers is often cited by researchers as a potential cause of higher rates of substance use disorders and mental health conditions among justice-involved populations.[19]

## *Medicaid Expansion Associated with Fewer Arrests*

One study compared rates of rearrest and the number of arrests per person in a county in a Medicaid expansion state to a nearby county in a state that had not expanded Medicaid for three U.S. regions (Midwest, Southeast and Southwest). Counties were selected so that demographics, poverty rates, household income, rates of jailing, and approaches to pre-release coordination and eligibility determination were similar. Comparisons were made between

[1] The study used the Kessler 6 (K6) nonspecific psychological distress scale to assess those who met the threshold for Serious Psychological Distress in the 30 days prior to the interview. A history of mental health problems was defined as an inmate having been told by a mental health provider (e.g., psychiatrist or psychologist) that they had 1) manic depression, 2) a depressive disorder, 3) schizophrenia, 4) post-traumatic stress disorder, 5) another anxiety disorder such as panic disorder or obsessive compulsive disorder, 6) a personality disorder, or 7) another mental or emotional condition.

counties before Medicaid expansion (July 1, 2012, through September 30, 2013, in the Midwest and Southwest, and January 1, 2015, through June 30, 2016, in the Southeast) and after Medicaid expansion (July 1, 2014, through December 31, 2015, in the Midwest and Southwest and January 1, 2017, through June 30, 2018, in the Southeast).

The researchers found that compared to the county in non-expansion states, Medicaid expansion was associated with a greater decline in the probability of rearrest in the Midwestern and Southwestern states (a 4.9 percent decrease in the Midwest and a 13.1 percent decrease in the Southwest) and an increase in the probability of rearrest in the Southeastern state (10.1 percent). The number of arrests per person also decreased in the Midwest and Southwest and increased in the Southeast. The average number of arrests per person declined by 0.1, or 5.8 percent, in the Midwest county pair (Hennepin County, Minnesota, the expansion state and Dane County, Wisconsin, a non-expansion state) and by 0.2 per person, or 13.3 percent, in the Southwest county pair (Pima County, Arizona, the expansion state and El Paso County, Texas, a non-expansion state).[20] The Southeast county pair (East Baton Rouge Parish, Louisiana, the expansion state and Hinds County, Mississippi, a non-expansion state) had the opposite result. The research found that Medicaid expansion was associated with more arrests per person in East Baton Rouge Parish. Arrests there increased by 0.2 per person (12.2 percent) compared to Hinds County, Mississippi. However, the authors note that changes to behavioral health and criminal justice practices required by a federal consent decree in Hinds County and the lack of integration and coordination between these two systems in East Baton Rouge Parish could have confounded their results.

Another study examined county-level arrests across all expansion states as of January 1, 2017, before and after Medicaid expansion, relative to matched counties in non-expansion states and found a 19 and 29 percent relative reduction in arrests for violence and a 25 and 28 percent decrease in low-level arrests. Reduction of county-level drug arrests were the largest. Medicaid expansion counties saw a negative difference of between 25 and 41 percent relative to matched counties in non-expansion states. Although Medicaid expansion is associated with negative relative differences, the overall arrest rates increased on average in both Medicaid expansion and non-expansion states during the three years following the implementation of the ACA.[21]

## *Medicaid Expansion Could Lead to Savings at County Jails in Kansas*

The Vera Institute explains two types of savings jails may see if fewer people are arrested: 1) variable costs, such as food, laundry and healthcare services or other programming that are

per person and change immediately as the number of people in the jail increases or decreases; and 2) “step fixed costs,” such as personnel costs, that change when the inmate population declines to the point that an entire housing unit can be closed and associated staffing reductions can occur.[22] Whether there are any step fixed cost reductions would depend on the size of the effect and would likely be uneven across jurisdictions.[23]

In addition to potential savings from reducing the number of arrests, Medicaid may soon be able to directly finance some healthcare services for incarcerated populations that are currently paid for by county jails. Federal law only allows Medicaid to pay for limited, community-based inpatient hospital care. Because of this, states (including Kansas) have focused on quickly reestablishing full Medicaid benefits for eligible inmates when they are released and connecting them to community services and supports. However, more information on a new opportunity may be available soon. Congress passed the Substance Use-Disorder Prevention That Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT Act) in 2018, which directed the U.S. Department of Health and Human Services (HHS) to issue guidance on how states can design Section 1115 demonstrations (also known as 1115 waivers) to provide Medicaid services to justice-involved individuals before release to support reentry. Eleven states (Arizona, California, Kentucky, Massachusetts, Montana, New Jersey, New York, Oregon, Utah, Vermont, and Washington) have submitted requests and are considering the policy, pending guidance from CMS and HHS. The range of services provided varies between states but most are considering providing the selected services for at least 30 days prior to release.[24, 25]

## *Medicaid Expansion Associated with Reduced Crime Rates*

One recent study compared changes in state- and county-level crime rates before and after Medicaid expansion between expansion and non-expansion states. They found Medicaid expansion was associated with a significant reduction in some property crime, such as vehicle theft (10.4 percent), and a significant reduction in violent crime (4.4 percent), such as homicide (8.1 percent), robbery (6.3 percent), and assault (2.9 percent), between 2010 and 2016. The authors attribute the change to access to care and self-reported improvements in health, increased financial stability and reduced exposure to high medical debt, and treatment for mental health and substance disorders.[26]

### *Medicaid Expansion Increased Health Insurance Coverage Among Justice-Involved Individuals*

Early estimates suggested that roughly 25 to 30 percent of people released from jails could enroll in Medicaid in states that expanded Medicaid.[27] A national study found that 1 in 3 (30.7 percent) justice-involved individuals (those who reported being arrested and booked – excluding minor traffic violations – paroled or on probation in the prior 12 months) were uninsured in 2014 – a decrease from 1 in 4 (40.4 percent) prior to the implementation of the ACA's Medicaid expansion in 2013.[28] Another study found greater increases in health insurance coverage rates after implementing the ACA in Medicaid expansion states. The insured rate among low-income adults with criminal legal involvement increased from 59.2 percent in 2010 to 82.5 percent in 2017 in expansion states compared to an increase from 45.4 percent in 2010 to 54.2 percent in non-expansion states – a 14.6 percentage point difference in the rate of increase.[29]

## *Foster Care*

While Medicaid expansion provides insurance for low-income adults, research shows that it also impacts children's mental health. Many of the same drivers of improvements in adult mental health due to Medicaid expansion improve children's early childhood experiences and reduce the likelihood of neglect, foster care admission and other adverse childhood experiences, a second-generation investment in prevention.

### *Medicaid Expansion Associated with a Reduction in Childhood Maltreatment*

Two studies have examined the impact of Medicaid expansion on childhood maltreatment, specifically neglect and abuse. One study examined all cases of physical abuse and neglect for children under 6 referred to state-level Child Protective Services and screened for further intervention after meeting a risk threshold. After Medicaid expansion,422 fewer cases per 100,000 children under 6 were reported each year as compared to non-expansion states. There was not a significant reduction in physical abuse rates.[30]

Another study found Medicaid expansion states have a reduction in reports of childhood maltreatment in each of the age groups 0-5 (13.4 percent), 6-12 (14.8 percent), and 13-17 (16.0 percent) as compared to non-expansion states. Expansion was associated with a 17.3 percent reduction in first-time neglect reports among children under the age of 6 and reductions in the rates of repeat neglect reports for children 6-12 (16.6 percent) and 13-17 (18.7 percent).

[31]Nationally, sixty percent (60.8 percent) of childhood maltreatment victims are neglect only. [32] As with the study of children under 6, there was not a significant difference in child abuse.

A third study examined the effect of Medicaid expansion on foster care admissions. In Medicaid expansion states, there was a 32.0 percent reduction in children entering the foster care system because of neglect, as compared to non-expansion states. This drove a 17.5 percent reduction in foster care admissions for any reason and a 23.3 percent reduction in foster care readmissions for any reason.[33]

Of the 3,032 Kansas children entering foster care in state fiscal year (SFY) 2022, the most frequent reason for removal from their home was related to neglect (32 percent), including physical neglect (13 percent), medical neglect (2 percent), educational neglect (1 percent) and lack of supervision (16 percent). In SFY 2022, 953 Kansas children had one of four types of neglect listed as the primary reason for removal from their home. Medicaid expansion states experienced a 32.0 percent reduction in foster care admissions related to neglect as compared to non-expansion states. Applying the reduced rate experienced in expansion states to 2022 Kansas foster care data equates to an estimated 305 fewer children entering the foster care system in Kansas because of neglect.[34]

# Limitations

While all projections have some degree of uncertainty, they remain useful tools for envisioning future spending and understanding the drivers of potential changes in spending resulting from changes in policy. National estimates and experience in other states that have expanded Medicaid are used as a proxy for what experience in Kansas could be if Medicaid were expanded. Kansas specific data are limited to KanCare claims for current enrollees provided by the Kansas Department of Health and Environment.

As discussed in *Appendix A* (page A-1), the literature review focused on comparisons between Medicaid expansion states and non-expansion states. Studies vary in the extent to which they can control for similarities and differences within and between those groups. It is possible that expansion and non-expansion states have unobserved characteristics that introduce systematic bias in the findings presented.

# Appendix A: Methodology

## *Research Questions*

This report seeks to answer the following research questions through a data analysis and literature review:

1) How many Kansas adults age 19 to 64 who may newly enroll if Medicaid is expanded will use behavioral health services and how many services might these members use?
2) What is the financial value to behavioral healthcare providers (including but not limited to those operating as certified community behavioral health clinics) in Kansas of the services that may be provided to adults newly enrolled in KanCare?
3) Does Medicaid expansion have other non-financial direct effects on behavioral health providers?
4) Does Medicaid expansion offset other costs that are incurred by state and local governments and the state economy because of untreated behavioral health problems?

## *Study Population*

The literature review and data analysis focused on Kansas adults age 19 to 64 with family income up to 138 percent of the federal poverty level (FPL) who would likely be eligible for Medicaid if expanded.

## *Secondary Data Sources*

The following secondary data sources were used to derive the revenue estimates provided in this report.

- U.S. Census Bureau 2019 American Community Survey 1-year Estimates accessed through IPUMS USA;
- Substance Abuse and Mental Health Services Administration (SAMHSA) 2019 National Survey on Drug Use and Health Public Use Data; and
- Inpatient, outpatient, professional and pharmacy KanCare claims from calendar year 2019.

## *Data Analysis*

Because limited data on healthcare expenditures and use are available in Kansas, the data analysis applied assumptions derived from the report, *"Projections of National Expenditures for*

*Treatment of Mental and Substance Use Disorders, 2010-2020*," available from SAMHSA here: https://store.samhsa.gov/product/Projections-of-National-Expenditures-for-Treatment-of-Mental-and-Substance-Use-Disorders-2010-2020/SMA14-4883.

The analysis followed the methodology used in SAMHSA's report to the extent practicable.

The general formula used to calculate provider revenues before and after expansion is as follows:

- Total Revenue Before Expansion = (adults age 19 to 64 newly enrolled in Medicaid if expanded) x (percent using mental health or substance use disorder services) x (average annual private or uninsured spending per user of services).
- Total Revenue After Expansion = (adults age 19 to 64 newly enrolled in Medicaid if expanded) x (percent using mental health or substance use disorder services) x (average annual Medicaid spending per user of services).
- Net Revenue = (total revenue after expansion) – (total revenue before expansion).

The assumptions and data sources used to derive the components of the formula above are listed below.

The number of **adults age 19 to 64 newly enrolled in Medicaid if expanded** is based on KHI's most recent estimates which were derived using the 2019 1-year American Community Survey Public Use Microdata Sample downloaded from IPUMS USA. A detailed description of the methodology used in the estimate is available from KHI here: https://www.khi.org/wp-content/uploads/2022/04/Technical-Notes-New-Federal-Incentive-Lowers-the-Estimated-Cost-of-Medicaid-Expansion.pdf.

The **percent of newly enrolled adults using mental health or substance use disorder services** was estimated from the *2019 National Survey on Drug Use and Health*. Among adults age 19 to 64 with income below 200 percent FPL, 9.9 percent of those who were uninsured received services for substance use disorder or mental health,16.2 percent of those who had private insurance received services and 22.2 percent with Medicaid received services. Use of mental health services was more common than was substance use disorder services – 8.3 percent of uninsured adults age 19 to 64 with income below 200 percent FPL received mental health services, 14.8 percent among those with private insurance and 19.9 percent among those with Medicaid. An estimated 2.6 percent of uninsured adults age 19 to 64 with income below 200 percent FPL received services for substance use disorder, 2.0 percent of those with

private insurance received services for substance use disorder and 4.1 percent of those with Medicaid received services for substance use disorder.

Average annual per person expenditures for those who use behavioral health services and are enrolled in Medicaid, private health insurance or for those who are uninsured were calculated from KanCare claims data and assumptions derived from the SAMHSA report described earlier.

SAMHSA's report, which is the basis for the proposed analysis of the overall impact of Medicaid expansion, defines behavioral health services as a claim that contains an International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code considered a "mental disorder" (i.e., codes in sections 290 through 319) as a principal diagnosis code. Because 2019 claims contained ICD-10 rather than ICD-9 diagnosis codes, the ICD-9 to ICD-10 General Equivalence Mappings from the Centers for Medicare and Medicaid Services (CMS) were used to identify the equivalent ICD-10 codes in the KanCare claims data.

SAMHSA excludes costs not directly related to treatment, such as those stemming from lower productivity, missed workdays, and/or drug-related crimes. They also exclude expenditures on non-mental health/substance use disorder (M/SUD) conditions that are caused by M/SUDs, such as liver cirrhosis.

A subset of mental disorders were excluded based on ICD-9 codes: dementias (290), transient mental disorders caused by conditions classified elsewhere (293), persistent mental disorders caused by conditions classified elsewhere (294), nondependent use of drugs-tobacco abuse disorder (305.1), specific delays in development (315), and intellectual disabilities (317–319). Also excluded are cerebral degenerations (e.g., Alzheimer's disease, 331.0) and psychic factors associated with disease classified elsewhere (316). Two pregnancy-related complications are included: complications mainly related to pregnancy—drug dependence (648.3) and mental disorders (648.4).

Prescription drug spending was included based on classes of drugs. Spending for the following classes of prescription drugs was included in the study regardless of diagnosis code on a claim:

- Antianxiety agents,
- Sedatives and hypnotics,
- Antipsychotics and antimanics,
- Antidepressants, and
- Central nervous system (CNS) stimulants if they were not categorized as Fibromyalgia Agents or Multiple Sclerosis Agents.

Medications used to treat opioid addiction are also incorporated:

- Buprenorphine, and
- Buprenorphine/naloxone.

Medications used in treating alcoholism also are captured:

- Acamprosate,
- Disulfiram, and
- Naltrexone.

KanCare claims list National Drug Codes (NDCs) for each product distributed. To establish which class of drug those products belong to, NDCs were cross-walked with the National Library of Medicine's RxNorm database (http://www.nlm.nih.gov/research/umls/rxnorm/). This produces a list of drugs identified by "RxNorm Concept Unique Identifiers," or RxCUIs. RxCUIs group chemically identical drugs into a single code number regardless of manufacturer or packaging size and type. This report used November 07, 2022, full release version of RxNorm. RxCUIs were grouped into one or more unique therapeutic categories and classes using version 8 of the Medicare Model Guidelines developed by the United States Pharmacopeial Convention. The CMS Formulary Reference File (FRF) Alignment file ("Alignment file") was used as a crosswalk.

The distribution of provider revenues before and after expansion is assumed to follow the 2015 national behavioral health spending distribution reported by SAMHSA in *"Behavioral Health Spending & Use Accounts 2006–2015."* The percentage distribution by provider applied in this analysis is listed in *Figure A-1*.

*Figure A-1.* **Behavioral Health Spending Distribution by Provider Type**

| Provider Type | Provider | Percent of Revenue |
|---|---|---|
| Specialty Sector Providers | General Hospitals, Specialty Units | 9.3% |
| | Specialty Hospitals | 10.7% |
| | Psychiatrists | 4.2% |
| | Other Professionals | 9.5% |
| | *Specialty Sector Provider Total* | *33.7%* |
| General Sector Providers | General Hospitals, Non-Specialty Care | 10.2% |
| | Nonpsychiatric Physicians | 5.8% |
| | Free Standing Nursing Homes | 7.4% |
| | Free Standing Home Health | 0.9% |
| | *General Sector Provider Total* | 24.3% |
| Mixed Providers | Clinics and Public Health Activities | 19.8% |
| Retail Prescription Drugs | | 22.2% |
| Total | | 100% |

*Source: Kansas Health Institute analysis of data provided in SAMHSA's Behavioral Health Spending & Use Accounts 2006–2015 Table A3.*

Revenue estimates for specific providers were derived from KanCare claims for adults age 19 to 64 not dually enrolled in Medicaid and Medicare and not enrolled through a waiver. Spending per person at each provider (community mental health centers, federally qualified health centers and residential rehabilitation facilities) was applied to the estimated people who would use services after expansion at those providers. The estimated number of users was derived from the rate of use among current KanCare enrollees.

## *Literature Review Methodology*

A limited scope literature review was conducted to address the following research questions:

- What are the direct financial impacts on the behavioral health system and its providers?
- What are the indirect impacts of addressing behavioral health issues on state and local governments?

The literature review included peer-reviewed literature and grey literature (i.e., research not published in peer-reviewed journals, such as research reports, government reports, etc.)

Peer-reviewed literature searches were conducted in the PubMed.gov database, using the advanced search function and subject headings where relevant. See *Figure A-2* for the search combinations used.

*Figure A-2.* **PubMed Search Combinations**

| |
|---|
| (Medicaid expansion) AND (mental health) |
| (Medicaid expansion) AND (community mental health center) |
| (Medicaid expansion) AND (mental health and finance) |
| (Medicaid expansion) AND (behavioral health) |
| (Medicaid expansion) AND (substance abuse) |
| (Medicaid expansion) AND (crime) |
| (Medicaid expansion) AND (uncompensated care) |
| (Medicaid expansion) AND (community health center) |

The PubMed search resulted in over 400 articles, most of which examined behavioral health impacts on individuals. The review was limited to articles published in the last five years. Snowball sampling (i.e., reviewing the reference list of a study to identify other relevant studies) also was employed for the specified date range. Titles and abstracts were then reviewed to identify whether the studies were relevant to the research question(s). After title and abstract review, a final set of 21 peer-reviewed articles with strong research methods were reviewed by the full project team.

In addition to peer-reviewed literature, targeted websites were searched for grey literature pertaining to the research questions. Targeted organization websites included:

- Commonwealth Fund
- The Pew Charitable Trusts
- Centers for Medicare and Medicaid Services, Behavioral Health Strategies
- Substance Abuse and Mental Health Services Administration
- National Council for Mental Wellbeing
- Prison Policy Institute
- Bureau of Justice Statistics
- U.S. Department of Health and Human Services Administration for Children and Families
- Kansas Department for Children and Families
- Kansas Legislative Post Audit Committee

Grey literature from the organizations above were included if they contained findings relevant to the research questions and were published after January 1, 2017. Google Scholar searches using search terms similar to those from PubMed review were conducted to ensure other relevant articles were not missed.

Relevant findings were reviewed in full and summarized into the following table shell and synthesized for the report.

| EndNote Citation | Topics(s) | Methods Summary | Relevant Findings |
|---|---|---|---|
| | | | |

# Appendix B: Endnotes

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