Costs of Criminal Justice Involvement Among Persons With Serious Mental Illness in Connecticut

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Objective: **This study sought to describe patterns and costs of criminal justice involvement among adults with serious mental illness who received services across public agencies within a single state. Costs were examined from the perspective of state agencies providing mental health, substance abuse, and criminal justice services.** ***Methods:*** **Administrative records for 25,133 adults who were served by the Connecticut Department of Mental Health and Addiction Services (DMHAS) during fiscal years 2006 and 2007 and who had a diagnosis of schizophrenia or bipolar disorder were matched with records of the state Medicaid program, Judicial Branch, Department of Correction, and Department of Public Safety. Unit costs for service events were combined with utilization data to calculate costs per person.** ***Results:*** **About one in four individuals was involved with the justice system during the two-year period. The justice-involved group incurred costs approximately double those of the group with no involvement—$48,980 compared with $24,728 per person. Costs were shared by several state agencies and Medicaid. DMHAS bore the largest proportion of state service costs, covering 49% of total costs for persons with justice involvement and 69% of costs for those without involvement.** ***Conclusions:*** **Criminal justice involvement is a complex and costly problem that affects a substantial proportion of adults with serious mental illness who receive services across state agencies. Applying per-person cost estimates in other states could help mental health and criminal justice systems to better plan, coordinate, and deliver cost-effective services to individuals with serious mental illness who become involved with the criminal justice system. (*Psychiatric Services* 64:630–637, 2013; doi: 10.1176/appi.ps.002212012)**

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Nearly two million people with serious mental illness enter U.S. jails annually; most have co-occurring addiction disorders, and many continue to cycle repeatedly through the criminal justice system (1–6). Justice-involved individuals with serious mental illness face daunting barriers to recovery and community reintegration. A history of criminal justice involvement, especially with a pattern of relapse and recidivism, affects long-term chances for stable housing, employment, income, marriage and community ties, and general well-being over the life course (7–16).

States' public mental health and substance abuse services departments, corrections systems, and social welfare programs face complex challenges in serving this population. Agencies with historically divergent missions, seemingly incompatible treatment philosophies, and competing interests find themselves providing services for the same people—sometimes sharing multiagency funding allocations within constrained state budgets and attempting to avoid unfavorable cost shifting. To aid in planning, coordinating, and delivering cost-effective services for justice-involved individuals with serious mental illness, states need accurate information about the specific service costs involved and how these costs are distributed among state agencies, but such information has been lacking.

This article presents the results of a study of the patterns and costs of criminal justice involvement in a population of adults with serious mental illness who were receiving services across public agencies in Connecticut. With three exceptions, the study looked at costs from the perspective of state agencies for mental health, substance abuse, and criminal justice services. We included costs paid by Medicaid, a shared state and federal program, and 50% of the Medicaid costs represent federal dollars. We excluded federal Medicare costs for individuals who were dually covered by Medicaid and Medicare. And some of the law enforcement costs were borne by cities and towns.

We first determined the proportion of the state's seriously mentally ill population that was involved with the criminal justice system and the extent and patterns of involvement across various components of the justice system. We then compared the demographic and diagnostic profiles of individuals with serious mental illness who were involved with the justice system and those who were not involved. We identified the types and intensity of services used by persons with serious mental illness, again comparing those who were involved in the justice system with those who were not involved. Finally, we made specific estimates of the costs, expressed in 2007 dollars, to the relevant state agencies involved with providing services to the two seriously mentally ill populations—those who were and were not involved in the criminal justice system.

Methods

Administrative records for a population of 25,133 individuals diagnosed as having schizophrenia or bipolar disorder and receiving services at any time during fiscal years 2006 and 2007 from the Connecticut Department of Mental Health and Addiction Services (DMHAS) were matched with records from the Department of Correction, the Department of Public Safety, the Judicial Branch, and the state Medicaid program. Unit costs for all relevant criminal justice and behavioral health and addiction service categories were calculated and combined with utilization data to provide a broad picture of public costs, by state agency payer, for the population eligible to be served at any time during fiscal years 2006 and 2007, including persons with and without justice involvement. All research activities involving the use of private health information for this study were reviewed and approved by the relevant jurisdictional institutional review boards.

Connecticut exemplifies a state with a good track record of addressing the needs of adults with serious mental illness, scoring among the top six states in the 2009 ranking of state programs by the National Alliance for Mental Illness and ranking eighth in mental health agency spending per capita (17–19). The state offers innovative programs for justice-involved persons with serious mental illness, a central state authority for both jails and prisons, and reliable information systems with common identifiers across the relevant state agencies. Connecticut also has a diverse population distributed across urban and rural areas.

Our study population was defined to include all adult clients of the DMHAS who met two conditions: received at least some DMHAS services during fiscal years 2006 and 2007 and had a recorded diagnosis of schizophrenia spectrum disorder or bipolar disorder. A population of 25,133 individuals who met these criteria was identified. Utilization and cost estimates were aggregated across the two-year study period.

DMHAS provided administrative records of state-operated or state-funded hospital and residential facility stays; halfway-house days; outpatient treatment encounters; case management services; forensic services, including jail diversion; and involuntary commitments (civil and criminal). The Department of Social Services provided claims data for Medicaid and ConnPace, a state prescription medication program for the elderly and disabled populations. The Department of Public Safety provided data on arrests for individuals who were later convicted of an offense, including dates of arrest, statutory charges, and offense class. The Department of Correction provided data on incarceration days and parole days. The Court Support Services Division of the Judicial Branch provided data on probation days. These data were merged by using unique identifiers, and service contacts and costs were aggregated over the two-year study period.

Criminal justice involvement was defined as having at least one of the following events during the study period: an arrest that resulted in a criminal conviction (that is, excluding arrestees who had dismissed charges and arrestees who were found not guilty at trial); any period of incarceration; time spent on probation or parole; participation in a jail diversion program; and forensic mental health involvement, such as undergoing an evaluation for competency to stand trial in a criminal matter, spending time in a forensic psychiatric hospital for restoration of competency to stand trial, or being found not guilty by reason of insanity.

Manual record reviews for a random sample of 200 justice-involved individuals treated in the Correctional Managed Health Care system supplied additional detailed information on patterns of mental health services within the correction system. The system provides mental health care, as well as medical, dental, pharmaceutical, specialty, and detox treatment, to patients within Connecticut's correction system.

Three types of measures were constructed for describing justice involvement and service utilization across the two-year study period. First, dichotomous event indicators were used to calculate two-year rates of prevalence of any arrests, incarcerations, inpatient hospitalizations, and other relevant categorical variables. Second, indicators of duration allowed us to characterize the extent of involvement and utilization. Third, ordinal or continuous variables indicated intensity and severity, such as the number of service visits and hierarchy of criminal offenses. Arrests were grouped into sixteen mutually exclusive categories of offenses, using the most serious charge associated with the arrest as the defining offense.

Table 1

Characteristics of persons with serious mental illness, by whether they were involved in the criminal justice system[a]

Characteristic	Involved (N=6,904, 27.5%)		Not involved (N=18,229, 72.5%)		Total study population (N=25,133, 100.0%)	
	N	%	N	%	N	%
Age (M±SD)	35.7±10.5		43.5±13.8		41.4±13.4	
Sex						
Male	4,477	66.8	8,447	46.3	12,906	51.4
Female	2,427	35.2	9,782	53.7	12,209	48.6
Race-ethnicity						
White	3,926	56.9	11,529	63.2	15,455	61.5
African American	1,556	22.5	2,398	13.2	3,954	15.7
Hispanic	1,163	16.8	2,708	14.9	3,871	15.4
Other	259	3.8	1,594	8.7	1,853	7.4
Primary diagnosis						
Schizophrenia	2,582	37.4	9,745	53.5	12,327	49.0
Bipolar disorder	4,322	62.6	8,484	46.5	12,806	51.0
Co-occurring substance use disorder						
Yes	4,512	65.4	5,183	28.4	9,695	38.6
No	2,392	34.6	13,046	71.6	15,438	61.4

[a] Significant difference between groups ($p<.01$) on all characteristics

Several methods of estimating unit costs were used, depending on data sources, setting, and payer. Costs per day for incarceration, probation, and parole were supplied by the Department of Correction. Average cost of an arrest (including costs for police, booking, court, attorney, and transportation) was estimated from a previous relevant study on justice involvement among persons with serious mental illness and substance use disorders (16), with inflation adjustment to 2007 dollars. That study measured police time for each arrest by reviewing a sample of police activity logs and calculating cost per hour of direct police service. Cost estimates for evaluations of competency to stand trial included time and travel costs of a psychiatrist and licensed clinical social worker for defendant assessment, report writing, and testimony. Mental health service costs not covered by Medicaid were funded by the state through DMHAS. Unit costs for these services were calculated in detail by using budgetary information supplied by DMHAS.

Utilization events and frequencies measured during the study period were multiplied by the corresponding unit costs for each category and then summed across persons and categories to obtain total costs by study group. Comparisons of service utilization patterns and costs were made between the groups with and without justice and across service sector and payer categories. Differences in patterns of utilization across the justice-involved group and the group with no justice involvement were tested for statistical significance with chi square tests for differences in proportions and t tests for differences in means.

Results

Just over one-quarter of the study population (N=6,904, 27.5%) had at least one type of involvement in the criminal justice system during fiscal years 2006 and 2007. Table 1 presents data on demographic characteristics of the study groups. On average, compared with individuals who were not involved in the justice system, justice-involved individuals were significantly younger (mean age of 35.7 versus 43.5 years), more likely to be male (67% versus 46%), and more likely to be African American (23% versus 13%). Individuals in the justice-involved group were more likely to have bipolar disorder (63%) than schizophrenia (37%), and this pattern was reversed for the group not involved in the justice system (47% with schizophrenia and 54% with bipolar disorder.) Those in the justice-involved group were also far more likely than their counterparts to have a co-occurring substance use disorder (65% versus 28%)

The frequency of involvement with various components of the justice system varied across the study population (Table 2). Sixty-two percent of the justice-involved group had an arrest during the study period, 58% had some incarceration time, and 4% had a forensic hospitalization. Table 2 also shows the extent of criminal justice involvement in the study population. Among those with any arrests, the mean number of arrests was 1.7. (In most cases, these arrests would not have included technical parole violations, unless the person was charged with a new offense.) The mean length of an incarceration in jail or prison during the study period was 157.2 days. Among those on probation, the mean duration of probation was 458.2 days.

A total of 7,157 arrests were recorded for 4,250 individuals in the study population; some individuals were arrested multiple times. If a person was convicted of multiple offenses associated with an arrest, only the most serious offense was coded. The largest proportion of arrests (43%) fell into a broad category of minor offenses, such as trespassing, breach of peace, prostitution, and technical violations of probation. However, this category also included driving while intoxicated, which varies in severity. The second largest category of arrests was for a property crime (21%), followed by drug offenses (15%), violent offenses (10%), other crimes against persons (9%), weapons offenses (1%), and miscellaneous felonies (1%).

Costs for various types of criminal justice contact varied widely (Table 2). The least costly type of contact was for an evaluation of competency to stand trial, which cost an average of $523 per person involved and a total of $265,132 for the affected group (N=508). The most costly type of involvement was forensic hospitalization, which cost an average of $287,062 per person involved and

Table 2

Type of criminal justice involvement and costs among 6,904 persons with serious mental illness who were involved with the justice system during fiscal years 2006 and 2007 combined

Type of involvement (service unit)	N	%	M	SD	Median	Total costs (in 2007 dollars)	Estimated cost per person involved (in 2007 dollars)[a]
Arrested	4,250	61.6	1.7	1.1	1.0	19,137,818	4,492
Incarceration (days)[b]	3,968	57.5	157.2	165.8	94.0	82,984,153	20,913
Probation (days)	3,299	47.8	458.2	209.0	469.0	15,478,323	4,692
Parole (days)	230	3.3	305.5	218.4	271.0	968,114	4,209
Jail diversion	1,973	28.6	409.9	206.6	417.0	3,946,000	2,000
Competency evaluation (evaluations)	508	7.4	1.2	.5	1.0	265,132	523
Forensic hospital (days)	300	4.3	249.1	264.4	111.5	86,118,505	287,062
All criminal justice services[c]	6,904	100.0				208,898,045	30,258

[a] Estimated per-person costs apply only to persons with any utilization of each type of services.

[b] Incarceration per diem costs include an estimate of Correctional Managed Health Care treatment costs.

[c] The total estimated per-person cost for criminal justice services applies to all persons with any criminal justice service (N=6,904)

a total of over $86 million for the small affected group (N=300). Arrest-related costs averaged $4,492 per person involved and over $19 million total, and incarceration costs averaged $20,913 per person involved and about $83 million total. By comparison, about $4 million—a small fraction of the cost of incarceration—was spent on jail diversion (exclusive of treatment costs, which are largely funded by DMHAS and Medicaid). Overall, the average justice-involved person in the study population incurred criminal justice costs of approximately $30,258 over the two years of the study.

Table 3 presents rates of utilization and costs of specific types of mental health and substance abuse treatment for the justice-involved and not-justice-involved groups, which includes the criminal justice total cost for the justice-involved group. Overall, the mean costs for mental health services were higher for the justice-involved group than for the group with no justice system involvement—$31,196 compared with $24,728 per person. However, patterns differed by type of mental health service and payer.

For inpatient treatment, the justice-involved group was more likely than the group with no justice involvement to have any Medicaid-paid hospitalizations (21% versus 16%) or any non–Medicaid-paid admissions to DMHAS-operated psychiatric hospitals (13% versus 6%). However, among individuals with any hospitalization, those with no justice system involvement had a far greater number of days of DMHAS-paid (non-Medicaid) inpatient treatment (124.7 days versus 37.8 days) and therefore incurred much greater DMHAS inpatient costs (mean per-person cost of $138,862 versus $38,190). This group also had an average of 83 more days of Medicaid-paid inpatient treatment than did the justice-involved group (254.9 versus 171.6 days.)

On average, individuals who spent time in a forensic hospital—awaiting restoration of competency to stand trial or having been found not guilty by reason of insanity—were hospitalized for lengthy periods (mean of 249.0 days), with correspondingly high costs (mean cost of about $287,000 per patient) to DMHAS, which pays for these services in Connecticut. Counting these costs as criminal justice–related services rather than mental health treatment substantially affects the estimated total for each category and the differences in average treatment costs for those with justice involvement and those with none.

In regard to outpatient mental health services, the justice-involved group had higher rates of utilization of emergency department services and Medicaid-paid psychotropic medications, compared with the group with no justice involvement. However, the group with no justice system involvement had higher rates of utilization of other outpatient mental health services and psychotropic medications covered by ConnPace.

Average outpatient treatment costs per person were similar in both groups. A notable exception was for outpatient services delivered in residential treatment facilities, where individuals with no justice system involvement had much higher average costs than justice-involved individuals—$58,068 per person versus $28,063 per person, respectively, for DMHAS outpatient services in residential treatment facilities, and $23,794 per person versus $14,036 per person, respectively, for Medicaid-paid services in residential treatment facilities.

The mean duration of Medicaid-paid psychotropic medication prescriptions for the group with no justice system involvement was 15 months, or 455.6 days, during the study period, compared with ten months, or 312.4 days, in the justice-involved group. Hence, the group with no justice involvement incurred medication costs that were nearly $2,000 higher per treated individual, on average, than costs for the justice-involved group.

Table 3

Utilization and cost of services for individuals involved in the criminal justice system and those with no involvement

Group and service type (payer or service unit)[a]	N	%	M	SD	Median	Total costs (in 2007 dollars)	Estimated cost per person involved (in 2007 dollars)
Involved with the criminal justice system (N=6,904)							
Inpatient treatment (days)							
Mental health and substance abuse treatment (Medicaid)	1,459	21.1	171.6	244.0	27.0	20,246,329	13,877
Medicaid only	962	13.9	24.5	41.1	13.0	18,406,039	19,133
Medicaid and Medicare dual coverage	497	7.2	456.4	220.0	478.0	1,840,290	3,703
Nonforensic mental health and substance abuse treatment (DMHAS)	877	12.7	37.8	94.2	8.0	33,492,786	38,190
Forensic (DMHAS)	300	4.3	249.0	264.4	111.5	86,118,505	287,062
Psychotropic medications (days)							
Medications (Medicaid)	5,197	75.3	312.4	215.5	273.0	18,393,440	3,539
Medications (ConnPace)	94	1.4	217.1	163.8	180.5	206,353	2,195
Outpatient services (Medicaid)							
Emergency department (visits)	2,794	40.5	5.8	8.0	3.0	1,606,950	575
Residential treatment (days)	83	1.2	7.8	6.6	6.0	1,164,949	14,036
Case management (visits)	1,178	17.1	8.4	7.4	6.0	3,265,072	2,772
Other services and therapies (visits)	3,803	55.1	26.6	37.4	12.0	7,699,431	2,025
Outpatient services (DMHAS)							
Residential treatment (days)	690	10.0	95.2	151.7	37.0	19,363,511	28,063
Case management (visits)	1,610	23.3	70.2	100.2	33.0	9,122,761	5,666
Other services and therapies (visits)	4,013	58.1	64.5	157.7	11.0	14,695,016	3,662
Total costs							
Mental health and substance abuse services	6,904	100.0				215,375,104	31,196
Criminal justice system (except forensic)	6,904	100.0				122,779,540	17,784
Total	6,904	100.0				338,154,644	48,980
Not involved with the criminal justice system (N=18,229)							
Inpatient treatment (days)							
Mental health and substance abuse treatment (Medicaid)	2,869	15.7	254.9	276.8	81.0	35,355,717	12,323
Medicaid only	1,379	7.6	32.5	81.8	13.0	29,000,269	21,030
Medicaid and Medicare dual coverage	1,490	8.2	460.8	230.7	510.0	6,355,447	4,265
Mental health and substance abuse treatment (DMHAS)	1,069	5.9	124.7	223.8	15.0	148,442,953	138,862
Forensic (DMHAS)							
Psychotropic medications (days)							
Medications (Medicaid)	12,493	68.5	455.6	235.2	506.0	66,761,291	5,344
Medications (ConnPace)	963	13.9	266.9	200.7	217.0	2,304,702	2,393
Outpatient services (Medicaid)							
Emergency department (visits)	4,542	24.9	4.0	6.4	2.0	1,911,746	421
Residential treatment (days)	197	1.1	13.2	9.0	12.0	4,687,414	23,794
Case management (visits)	4,322	23.7	11.5	9.0	9.0	16,427,778	3,801
Other services and therapies (visits)	10,208	56.0	25.2	33.6	13.0	10,962,822	1,074
Outpatient services (DMHAS)							
Residential treatment (days)	995	5.5	319.5	282.1	260.0	57,777,661	58,068
Case management (visits)	4,708	25.8	94.0	131.8	46.0	31,222,178	6,632
Other services and therapies (visits)	13,380	73.4	123.0	247.0	19.0	74,914,008	5,600
Total	18,229	100.0				450,768,271	24,728

[a] DMHAS, Department of Mental Health and Addiction Services; ConnPace, a state prescription medication program for the elderly and disabled populations.

The proportion of individuals receiving substance abuse treatment (not shown in Table 3) was about four times higher in the justice-involved group than in the group with no justice system involvement: 35.6% and 12.8%, respectively, received Medicaid-paid substance abuse treatment, and 17.2% versus 4.4%, respectively, received substance abuse treatment covered by DMHAS. Average Medicaid-paid costs for substance abuse treatment were $1,823 per person ($4,601,820 total) in the justice-involved group, compared with $1,523 per person ($3,687,193 total) in the group with no justice system involvement. Average DMHAS-paid costs for substance abuse treatment were $12,583 per person ($14,910,902 total) in the justice-involved group, compared with $8,699 per person ($6,907,202 total) in the group with no justice involvement.

Table 4

Mental health and criminal justice costs for individuals involved in the criminal justice system and those with no involvement, by state payer agency[a]

Group and service type	DMHAS	Department of Social Services and Medicaid	Department of Correction	Judicial and police[b]	Total
Involved with the criminal justice system (N=6,904)					
Criminal justice services					
Arrest	—	—	—	19,137,188	19,137,188
Incarceration	—	—	82,984,153	—	82,984,153
Parole	—	—	968,114	—	968,114
Probation	—	—	—	15,478,323	15,478,323
Competency evaluations	265,132	—	—	—	265,132
Competency restoration (forensic hospital)	86,118,505	—	—	—	86,118,505
Jail diversion	3,946,000	—	—	—	3,946,000
Subtotal	90,329,637	—	83,952,267	34,615,511	208,897,415
Mental health and substance abuse services					
Inpatient	33,492,786	20,246,329	—[c]	—	53,739,115
Civil commitment			—	47,940	47,940
Emergency department visits		1,606,950	—	—	1,606,950
Community residential programs	19,363,511	1,164,949	—	—	20,528,460
Case management	9,122,761	3,265,072	—[c]	—	12,387,834
Other outpatient services and therapies	14,695,016	7,699,431	—[c]	—	22,394,447
Medications		18,599,793	—[c]	—	18,599,793
Subtotal	76,722,014	52,582,525	—	47,940	129,352,479
Not involved with the criminal justice system (N=18,229)					
Mental health and substance abuse services					
Inpatient	148,442,953	35,355,717	—	—	181,501,302
Civil commitment			—	95,880	95,880
Community residential programs	57,777,661	4,687,414	—	—	62,465,076
Emergency department		1,911,746	—	—	1,911,746
Case management	31,222,178	16,427,778	—	—	47,649,956
Other outpatient services and therapies	74,914,008	10,962,822	—	—	85,876,830
Medications		69,065,993	—	—	69,065,993
Subtotal	312,452,681	138,411,470	—	95,880	450,960,031
Total cost	479,504,331	190,993,995	83,952,267	34,759,331	789,209,924
Share of costs for all payers (%)	61	24	11	4	

[a] Costs are reported in 2007 dollars. DMHAS, Department of Mental Health and Addiction Services

[b] Includes state and municipal law enforcement. Court involvement for persons not involved in the criminal justice system means civil procedures only.

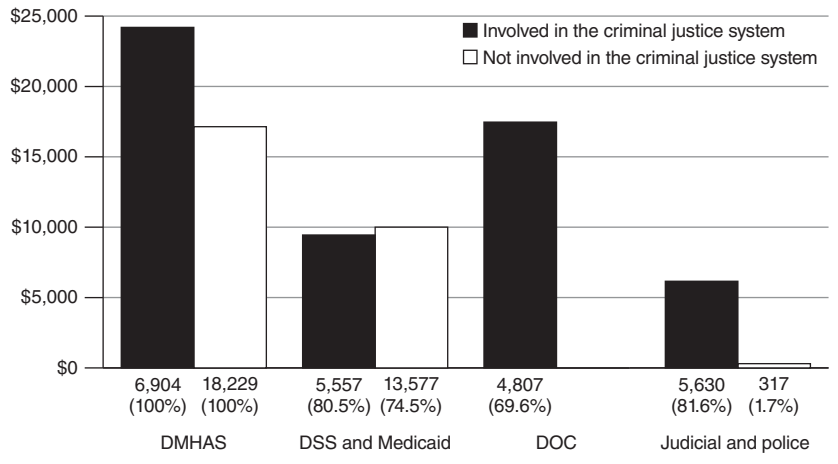
[c] Costs of behavioral health services provided within Department of Correction facilities are included in per-diem costs of incarceration.

In the subsample of 200 persons in the Department of Correction who received services from the Correctional Managed Health Care system, about one in ten (N=19; 9.5%) experienced an acute psychiatric admission while incarcerated during the study period. Among those admitted, the mean±SD number of admissions was 2.1±2.5, and the mean number of days of inpatient care was 67.8± 135.1. In the same justice-involved subsample, 66 persons (33%) received prescribed psychotropic medications for at least one day while under correctional supervision during the study period. Among those with any medications prescribed, the mean number of psychotropic medication prescriptions was 7.80±7.75, representing a mean of 236.0±239.7 days' supply per person of medication during the two-year study period. For purposes of cost analysis, the costs of mental health services (and all other health care costs) for incarcerated individuals were folded into the correctional institutions' per diem estimates, that is, as a "surcharge" shared by all incarcerated individuals.

A summary of the distribution of costs by state payer across all categories of mental health and criminal justice services is shown in Table 4. DMHAS bore the largest proportion of costs for the two groups combined—approximately $480 million, or about 61% of the approximately $789 million in costs distributed across the four state agencies during the study period. By comparison, Medicaid paid about $191 million, nearly one-quarter of total system costs, the Department of Correction paid about $84 million (11% of total costs), and

Figure 1

State agency costs per person receiving each type of service for individuals with and without criminal justice system involvement[a]



[a] DMHAS, Department of Mental Health and Addiction Services; DSS, Department of Social Services; DOC, Department of Correction. Percentages in parentheses represent portions of the two samples (involved and not involved in the criminal justice system).

the Court Support Services Division of the Judicial Branch and law enforcement covered about $35 million (4% of total costs).

DMHAS bore about 49% of the total costs for the justice-involved group and about 69% of the total costs for the group with no justice system involvement. The Department of Correction covered about one-quarter of the total costs for the justice-involved group alone. The Department of Social Services and Medicaid covered about 16% of costs for the justice-involved group and about 31% of costs for the group with no justice system involvement. About 10% of the total costs for the justice-involved group were borne by the Court Support Services Division of the Judicial Branch and by law enforcement agencies.

Figure 1 illustrates the differences in mean per-person costs borne by the various state agencies for the justice-involved group and the group with no involvement. DMHAS spent approximately $7,000 more per person on justice-involved individuals than on those with no involvement; however, forensic hospitalization alone was responsible for a large share of this difference in costs. By comparison, Medicaid paid approximately the same amount per person for individuals in the two groups. Judicial and law enforcement costs exceeded $6,000 per person in the justice-involved group but were only $302 (for civil commitment) in the group with no justice system involvement.

In summary, the average combined inpatient and outpatient mental health and substance abuse services costs were slightly higher for justice-involved individuals than for those with no involvement—$31,196 versus $24,728 per person, respectively, over the study period. The justice-involved group incurred total costs of $48,980 per person—approximately double the per-person costs for those who were not involved with the justice system ($24,728).

Discussion

Criminal justice involvement is a complex and costly problem that affects a substantial proportion of adults with serious mental illness. About one in four adults with schizophrenia or bipolar disorder in the public behavioral health care system in Connecticut were involved with the criminal justice system over a two-year period. The addition of criminal justice costs doubled the total system costs per person for these service recipients.

The justice-involved group was significantly younger, more likely to be male, and more likely to be African American than their counterparts who were not involved with the justice system. Justice-involved individuals were also more likely than their counterparts to have a diagnosis of bipolar disorder and to have a co-occurring substance use disorder. These clinical differences may partially explain the finding that the justice-involved group tended to have a greater number of acute hospital admissions of short duration, whereas the group with no justice involvement tended to have fewer but longer admissions. Group differences in diagnosis and comorbidity may also explain the finding that the justice-involved group was about four times more likely than the group with no involvement to receive substance abuse treatment, in both DMHAS and Medicaid-paid categories.

Of the state agencies involved, DMHAS bore the largest proportion of costs for the study population of 25,133—approximately $480 million, or about 61% of the total of approximately $789 million distributed across the four state agencies during the study period. Medicaid covered nearly one-quarter of total system costs (although Medicaid-paid claims may not reflect a provider's total cost), the Department of Correction covered about 11%, and the Court Support Services Division of the Judicial Branch and law enforcement covered just over 4% of total costs.

DMHAS bore 49% of the total costs for the justice-involved population and about 69% of costs for the population with no justice system involvement. The agency spent approximately $7,000 more per person on justice-involved individuals than on their counterparts with no involvement; however, forensic hospitalization was responsible for a large share of the difference in costs.

Conclusions

This study offers policy makers and administrators the first comprehensive estimates of state mental health, law enforcement, and criminal justice costs associated with providing services to persons with serious mental illness across state agencies. By applying these per-person cost estimates to analogous service populations and agencies, other states should be better able to plan, coordinate, and

deliver more cost-effective services to individuals with serious mental illness who become involved with the criminal justice system.

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