Mental Illness in Jails Supplement

FY 2016

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Summary

Virginia's Compensation Board provided data on jail inmates with mental illness. A previous report has been written that describes that data. This analysis expands on that report, providing additional detail on diverse components of the dataset such as inmate aggression and mental health screening.

Contents

I. Data Sources

Most of the data in this report are taken from a survey of mental health in jails undertaken by the Virginia Compensation Board and more fully described in their report on that survey entitled *Mental Illness in Jails Report 2016*. Data on temporary detention orders by locality were obtained from the Supreme Court of Virginia.

II. Mental Illness and Substance Abuse Across Virginia's Regions

The Department of Behavioral Health and Developmental Services (DBHDS) coordinates mental health services across 5 regions, which are further divided into 40 community services boards (CSBs). The number of inmates with substance use disorders (SUD), with or without co-occurring mental illness (MI), differed by DBHDS region (Chi-square=10.69, df=4, p=0.0303), with jails in region 2 having the highest median number of SUD inmates and regions 4 and 5 having the lowest (Table 1). The number of inmates with MI per jail was not associated with region. Median numbers across Virginia are shown in Table 2.

Table 1: Median Number of inmates with SUD in June 2016, by DBHDS Region

Region	Number of Jails	Median Number SUD Inmates
1 (Northwest VA)	14	110
2 (DC area)	5	340
3 (Southwest VA)	15	65
4 (Richmond area)	9	45
5 (Southeast VA)	16	41

Table 2: Distribution of inmates with MI, with or without SUD.

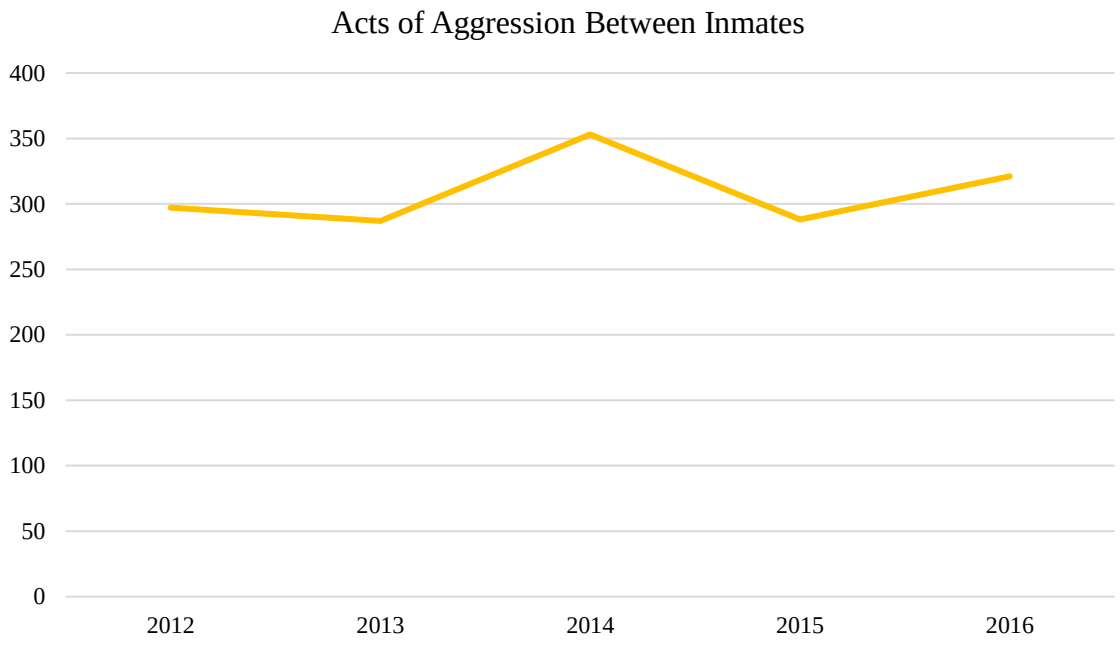
Disability	Median Inmates per Jail	Interquartile Range (IQR)
Co-occurring MI/SUD	33	6-72
MI with or without SUD	66	31-161

III. Acts of Inmate Aggression

The compensation board survey included information on acts of aggression committed by inmates against staff and other inmates. Determinations of victim and perpetrator status are made by jail staff, which could impact the reliability of results. Out of all acts of aggression by an inmate, the perpetrator was diagnosed as mentally ill in 31% of cases. Out of all acts of aggression in which one inmate assaulted or threatened another, the victim was diagnosed as mentally ill in 16.5% of cases. Aggression between inmates was not associated with DBHDS

region. Figure 1 shows the trend in aggression between inmates, with or without MI, from 2012 through 2016.

Figure 1: Total number of acts of aggression between inmates in June of each year.



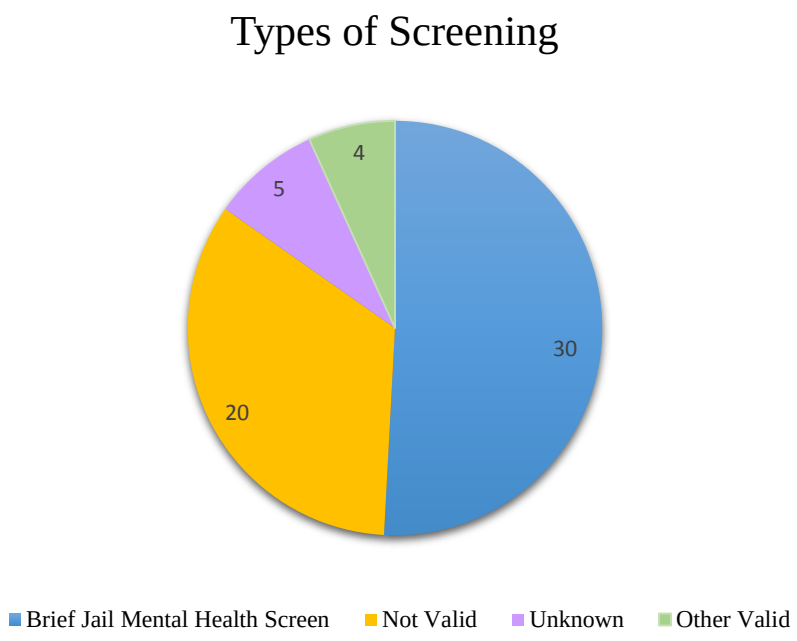
IV. Screening

Different types of screening are used in jails to determine if an inmate may need a psychological assessment. Some of them are valid for this purpose, and some are not (Table 3). There were also some jails that did not or could not say if the instrument was valid, either because the screening was conducted by CSB staff, or because they listed the person who approved the test, not the name of the test (Figure 2). One jail did not respond to questions about screening.

Table 3: Forms of screening used in jails.

Valid Measures	Non-valid measures
• Brief Jail Mental Health Screen • JASAT (Jail Admission Screening Assessment Test) • GAIN (Global Appraisal of Individual Needs) • Naphcare MH Screening • NCCHC (National Commission on Correctional Health Care)	• Booking questionnaire • Instruments designed by CSB staff • Instruments designed by jail MH staff • Suicide Risk Assessment • "mental health screening" (with no further clarification) • CorEMR Mental Health Screening • Mental Health Initial Evaluation • Intake Receiving Packet • Integrated Intake Screening • No Screening

Figure 2: Frequency of types of screening used across 59 jails.



Anxiety diagnosis was associated with the type of screening used (F=5.1, p=0.0156). Jails that used valid measures tended to have more inmates identified with anxiety than jails with unknown or non-valid measures (Table 4). Other diagnoses were not associated with the type of screening.

Table 4: Median number of inmates diagnosed with anxiety disorders, by type of screening.

Type of Screening	Median Number Anxiety
BJMHS	11
Other Valid	12.5
Not Valid	4.5
Unknown	1.0

V. Types of Mental Illness

Seven categories of mental illness were identified in the survey: anxiety disorder, major mood disorders, mild depression, schizophrenia, post-traumatic stress disorder (PTSD), other MI diagnosis and believed ill with no diagnosis. Major mood disorders include bipolar disorder and major depression. The greatest number of inmate days were attributed to inmates with major mood disorders (Table 5). Major mood disorders were also the most frequent diagnoses among inmates (Table 6). Diagnosis category was associated with type of crime committed (Chi-square=143.99, df=36, $p < 0.00001$). Table 7 identifies which groups are statistically more likely or less likely to commit certain crimes. It should be noted that, in this analysis, the different diagnostic groups are being compared with inmates with other MI diagnoses, not with the prison population as a whole.

Table 5: Distribution of inmate days by diagnosis category.

Diagnosis	Median Bed Days per Jail	IQR
Major mood disorder	275	91-994
Schizophrenia	148	30-420
Anxiety	119	30-208
Mild Depression	60	0-418
Other Diagnosis	52	0-445
PTSD	51	1-241
No Diagnosis	1	0-60
All MI	1235	333-3455

Table 6: Distribution of inmates by diagnosis category.

Diagnosis	Median Inmates per Jail	IQR
Major mood disorder	20	8-46
Schizophrenia	8	2-19
Anxiety	7	2-15
Other Diagnosis	7	0-28
Mild Depression	6	0-20
PTSD	3	0-13
No Diagnosis	0	0-3

Table 7: Increased and decreased frequency of certain crimes in diagnostic groups.

Type of Offense	Diagnostic Groups More Likely to be Charged	Diagnostic Groups Less Likely to be Charged
Ordinance Violation	anxiety, mild depression	major mood disorders, suspected MI
Drug-related Misdemeanor	--	other
Non-violent Misdemeanor	anxiety, mild depression	major mood disorders, other
Violent Misdemeanor	--	suspected MI
Drug-related Felony	anxiety	schizophrenia
Non-violent Felony	major mood disorders, suspected MI	--
Violent Felony	schizophrenia, other	anxiety disorders, suspected MI

VI. Treatment

Data was obtained on four categories of treatment: individual therapy, group therapy, group SUD treatment and other treatment. Hours of treatment provided by the local CSB varied by DBHDS region (Table 8, Chi-square=15.15, df=4, p=0.0044). The statistical significance is driven by the number of hours in region 2, which is much greater than the other four regions. Treatment from other types of providers did not differ by region at a statistically significant level. Total treatment hours differed by region as well (Chi-square=14.21, df=4, p=0.0067).

As seen in Table 9, hours of treatment varied by provider (Chi-square=19.9, df=4, p=0.0005), with psychiatrists providing the highest median number of hours per jail. They also varied by type of treatment (Chi-square=19.38, df=3, p=0.0002), with the highest median number of hours provided as individual therapy. Hours of individual counseling per recipient were associated

with DBHDS region (Chi-square= 12.287, p= 0.01534), with region 2 having the highest number of hours (Table 10).

Table 8: Distribution of treatment hours from CSB staff and overall, by DBHDS region.

DBHDS Region	Median CSB Treatment Hours per Jail	IQR	Median Overall Treatment Hours per Jail	IQR
1	7	0-40	63.5	8-119
2	658	469-1536	1536	533-2065
3	0	0-11	10	0-150
4	4	0-43	4	0-208
5	4	0-104	71.5	3-519

Table 9: Distribution of treatment hours, per jail, by treatment type, and by treatment provider.

Treatment	Median Hours Treatment	IQR
Types of treatment		
Individual	22	3-129
Group SUD	8	0-77
Group Therapy	0	0-8
Other	0	0-19
Treatment Providers		
Psychiatrist	11	0-35
M.D.	0	0-4
Jail Staff	0	0-6
CSB Staff	4	0-58
Private Contractor	0	0-48

Table 10: Hours of individual counseling per recipient, by region.

Region	Median Hours per Jail	IQR
1	0.45	0.07-0.93
2	2.35	1-2.62
3	0.71	0-1.06
4	1.33	0.10-1.88
5	0.17	0-1

Fifty-eight jails provide medication for inmates. There are a wide variety of pharmacies used, and a number of strategies employed if inmates refuse medication (Table 11). Ten jails did

not identify procedures for responding to medication refusal. An additional ten only had refusal forms or refusal logs, without any further attempts to encourage compliance.

The medications provided in jails were categorized as antipsychotics, mood stabilizers, antidepressants, and anti-anxiety medications. In June 2016, the most frequently dispensed category of medication was antidepressants (Table 12). The most frequently dispensed type of antipsychotic is Seroquel and the most frequently prescribed type of anticonvulsant is Depakote. Both of these medications are available in the community through Medicaid; however at least 53% of antipsychotic medications prescribed were not Medicaid-compatible. At least 24% of anticonvulsants and mood stabilizers were not available through Medicaid either.

Table 11: Pharmacies and Refusal Protocols

Pharamacies that provide jails with medications	Procedures used when inmate refuses their prescribed medication (Number of Jails)
• Anthem • CCS/Conmed • Commonwealth Pharmacy • Contract Pharmacy Services (CPS) • Corizon • Correct Care • Correct Rx • CSB • CVS • Diamond • Family Long Term Pharmacy • Family Pharmacy • Farmville Pharmacy • H&H • Individual Pharmacist • Kroger • Mediko • NaphCare • Pharmacorr • PNS • Rappahannock Creative • Rite Aid • Southern Health • Spring Drug • Stony Creek Pharmacy • Walgreens • Westwood	• Require inmate to sign refusal form (18) • Log refusal (12) • Notify MH provider (8) • Inmate meets with MH provider (8) • Monitor inmate (7) • Counsel inmate (6) • Educate inmate (5) • Notify physician (4) • Assess inmate (4) • Consult with MH provider (3) • Redirect (3) • Pursue temporary detention order (TDO) (2) • Notify pharmacist (1) • Notify state psychiatric facility (1) • No protocol (10)

Table 12: Medications provided in jails.

Medication	Number of prescriptions dispensed in 6/2016	Jails that provide	Median per jail	IQR
Anti-psychotics				
Seroquel*	626	53	6	0-16
Risperdal	504	57	5	0-9
Zyprexa	411	57	2	1-7
Haldol	244	56	1	0-6
Geodon*	151	50	--	--
Abilify*	91	48	1	0-2
Triliafon	62	53	--**	--
Thorazine	34	49	--	--
Prolixin	32	53	--	--
Clozaril	3	48	--	--
Other anti-psychotics	295	54	--	--
Mood Stabilizer/Anticonvulsants				
Depakote*	505	58	4	1-12
Lithobid	392	58	2	0-7
Tegretol*	198	57	1	0-2
Topamax*	150	55	1	0-3
Trileptal*	46	54	--	--
Other mood disorder meds.	372	55	--	--
Other				
Antidepressants	4818	58	34	15-116
Anti-anxiety meds.	1789	55	5	1-34

*Also available through Virginia Medicaid.

**Distributions not described for medications that were distributed by fewer than half of jails during June 2016.

VII. Case Management

Thirty-seven jails identified types of follow up case management that they provided to former inmates after release. Of the remaining 22, four stated that they provided follow up without specifying the type of service, 17 admitted to providing no follow up and one did not answer the question. The provision of mental health services during incarceration is associated with provision of follow up case management (Chi-square=6.15, p=0.0131). Among jails that provide mental health services to inmates, 78% also provide case management after release. Among jails that do not provide mental health services to inmates, only 42% provide case management. This could be a function of the level of community resources available in

different areas. The most common type of follow up is referral to the CSB (Table 12). The second most frequent option, discharge planning, may also include CSB involvement.

Table 12: Types of case management provide to inmates with MI after they are released.

Type of service/support	Number of jails that provide service	Percent of all jails
Referral to CSB	17	29
Discharge planning	9	15
Referral to other services (e.g. housing, primary care)	5	8
Mental health services	4	7
Medication management	3	5
Crisis services	2	3
Referral to offender advocacy organizations	2	3
Handouts	1	2
Housing	1	2
SA services	1	2
ID services	1	2

VIII. Housing Patients with MI in Jail

Only 21 jails contain an MH treatment unit. Among those 21, the median number of beds is 24 (IQR 5-48). Isolation is the other alternative to housing with the general jail population. 43 jails placed at least one inmate with MI in isolation in June 2016. Two other jails were excluded from analysis due to incorrect data. Overall, the median number of MI isolation days per jail was 23 (IQR 0-261). The median amount of time those inmates spent in isolation was 5 days (IQR 0-16) per person.

IX. Impact of CIT Training

Across the state, higher proportions of jail staff with crisis intervention team (CIT) training is associated with lower numbers of inmates with MI ($t=-2.11$, $p=0.0425$), in spite of the fact that jail staff are not involved with brining inmates to jail. This could be explained if the proportion of jail staff with CIT training is similar to the proportion of the local police force with CIT training, although there is not sufficient data available to support or refute that idea. Between June 2015 and June 2016, the number of CIT-trained correctional officers in Virginia increased

38%, from 1325 to 1822. This represents an increase from 15% to 20% of the jail staff. Over the same period of time, the number of inmates with mental illness decreased 7%, from 7054 to 6554. The change in CIT-trained jail staff was not associated with any changes in the number of temporary detention orders (TDO) endorsed by the local CSBs. A TDO is an order issued by a magistrate to detain a person in a psychiatric treatment facility, without their consent, for 72 hours.